An Address
ON
THE SERUM TREATMENT OF DIPHTHERIA.

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GENTLEMEN,—When I accepted your kind invitation to deliver an address before you it appeared to me that I could not choose a subject which was of more pressing importance to us as practitioners of medicine than that of the serum treatment of diphtheria. It is one, indeed, which relates to an important development of modern medicine, and deals with a disease which has always been a very fatal one, and one which has baffled in its treatment all the previous resources of the medical art. It is claimed for the antitoxic serum that it is a great additional aid in the treatment of the disease—a claim which may have been overstated by some, but has certainly been belittled by others. I do not think, and I feel sure you will agree with me, that anything like blind partisanship, or the opposite, ought to enter into a practical question of the treatment of a disease. And it behoves us to soberly and judiciously estimate the value of this treatment, to decide what exactly it does for our patients, how far it succeeds and how far it fails. In what I have to say, therefore, I make no apology for giving you my own experience of the treatment as carried out at University College Hospital, more especially as I may say I began the study of the practical application of the antitoxic serum in diphtheria in a thoroughly critical spirit.

Those who work at medical science solely in laboratories are perhaps apt to be over-sanguine in regard to the practical application of their discoveries in medicine. It is well, therefore, that the daily familiarity with the ever-varying aspects of disease as it occurs in patients should act somewhat as a brake on the too great enthusiasm engendered by purely laboratory work, valuable as this is. We may, however, go too far, and the brake too strongly applied may actually delay the practical application of a valuable discovery. The serum treatment of diphtheria rests on a very good experimental foundation, which is so clear that it gave hope that its practical application would be beneficial in an admittedly very fatal disease. Before the use of antitoxic serum the majority, as a rule, of cases of diphtheria recovered—a result clearly shown when a large number of cases was considered. But how many of the patients died unexpectedly from cardiac syncope, from paralysis, and suppression of urine? And, indeed, in how many cases in children did it happen that in an apparently mild case of faucial diphtheria the membrane slowly but surely spread, in spite of active treatment, to the nose and larynx, causing death? I will not say at present that the treatment by antitoxin has removed all these difficulties, but it has removed some, and there seems but small doubt that its proper and extended application in the future will remarkably diminish the mortality from the disease.

I will briefly sketch to you the experimental facts on which the treatment is based. The first point is that the bacillus diphtheriæ is the cause of the disease, producing at the place where it grows a tough, false membrane, which gradually spreads. The bacillus is, as a rule, limited to the membrane; in mild and moderate cases it appears always to be so, but in more severe cases it may be found in the spleen and lungs. The bacillus causes the illness which we know as diphtheria by means of the poisons which it forms. These poisons belong chiefly to two classes. One is very powerful; it may be called the toxin. It is produced artificially by growing the bacillus in broth containing from 1 to 2 per cent. of peptone. After the bacillus has grown in this solution for three weeks or a month it may be filtered off, the filtrate being found to be very toxic. So poisonous are some specimens of it that as little as $\frac{1}{15}$th c.c. will kill a guinea-pig weighing 300 grammes. The dose of actual poison contained in so small a quantity of the liquid is practically imponderable. The bacillus also digests proteids just as pepsin or pancreatin does and forms products (albumoses) which have a slower but similar action to the toxin. These poisons, by their effect on the nervous system, on the heart, on the heat-regulating mechanism, and on the general metabolism of the body, cause the symptoms of the disease.

One of the important developments of modern medicine has been in the way of demonstrating in great part what actually occurs when we speak of the resistance of the body against an infective disease. We now know that this resistance has, so to speak, two component parts the exact relationship of which has not yet been demonstrated. On the one hand, the wandering cells (leucocytes) of the tissues are attracted to the seat of invasion and attack the micro-organisms; this is phagocytosis. On the other hand, a substance is formed which is antagonistic to the growth of the micro-organism in the tissues and to the poisons formed by it. This antitoxic substance—or antitoxin—is found in the blood serum. In the case of diphtheria it may be produced in enormous quantities in the horse by injecting into the animal graduated and increasing doses of toxin. The horse does not suffer in nutrition, but gradually forms the antitoxin in its blood. The poison, therefore, is made to form its own antidote by passing it through the body of an animal. The amount of antitoxin formed in any particular horse varies; but this point need not detain us further. What is of more interest from a practical point of view is the action of the antitoxic serum. It possesses two actions: it is a vaccine and it is an antidote. If, for example, an infinitesimal dose ($\frac{1}{10}\frac{1}{000}$th to $\frac{1}{10}\frac{1}{000}$th of body weight) be injected into a healthy guinea-pig, and about twelve hours later a dose of the bacillus diphtheriæ injected into the animal, which would usually kill it in about thirty-six hours, the animal will not die; it will not, if the serum be of a certain strength, show any symptoms, but will survive as long as an ordinary guinea-pig. In this case the antitoxin has protected the animal against the disease produced by the bacillus; it has produced for the time a condition of artificial immunity. Again, if a fatal dose of the toxin (the chemical poison of the bacillus) be mixed with a very small amount of the antitoxin and injected into a guinea-pig the animal will remain perfectly well if the serum be of a certain degree of antitoxic strength. Both these methods are used for estimating the strength of any particular serum. The first is Roux's, the second is Behring's and Ehrlich's and is that almost universally adopted now. For application in cases of disease the strength of the serum must be known, and it ought to be guaranteed on each bottle. It is one of the most important factors in its use. For practical purposes the strength is expressed in the number of so-called normal units. A normal unit is ten times the amount of antitoxic serum which is requisite to completely counteract the effect of ten times the lethal dose (within forty-eight hours) of toxin in a guinea-pig weighing from 250 to 300 grammes. Thus to give an example. A sample of toxin is found to kill the guinea-pig when given in doses subcutaneously of $\frac{1}{10}$th c.c. For testing, ten times this amount is taken—i.e., 1 c.c.; this is ten lethal doses. When this amount is mixed with, say, $\frac{1}{10}\frac{1}{00}$th c.c. of antitoxic serum and injected into a guinea-pig it is found that no result follows; the poison is counteracted. Ten times this amount of serum, which has counteracted ten lethal doses, therefore, contains 1 normal unit—i.e., $\frac{1}{10}\frac{1}{0}$th c.c. Therefore 1 c.c. contains 100 normal units and 10 c.c. 1000. The serum can be obtained much stronger than this, and I have during the last six or eight months been using a serum (kindly supplied to me by Dr. Sims Woodhead) which contains at least 400 normal units in the cubic centimetre. The great advantage of this strong serum is the small dose of liquid injected. Thus I often give 8000 normal units to patients in 10 c.c. of liquid, whereas with some samples of serum one would have to inject 80 c.c. of liquid, a somewhat formidable proceeding in a little child. What we want is the strongest serum we can get, and I hope—indeed, I am certain—that very soon in this country strong serum will be obtainable by everyone, and that none but the strongest serum will be sold. It is, in my opinion, of vital importance in the treatment.

Another essential point about the serum is that it must be

bacteria-free. It is a liquid in which bacteria grow very readily, and it ought to be tested before being sent out. It is as a rule mixed with an antiseptic to keep it free from bacteria, the small quantity of the drug added (tri-cresol or carbolic acid) having no appreciable effect on the patient. In applying the antitoxin to cases of disease its twofold action is looked for—viz., its immunising property and its antidotal property. In discussing the properties of antitoxic serum it was stated that the tests were applied in the one case by injecting it into an animal and subsequently inoculating the animal with the bacillus, and in the other by mixing the antitoxin with the toxin and then injecting it. These conditions of experiment, however, are not quite comparable to those in which we have to treat cases of diphtheria. For when confronted with a case the disease has already begun, the bacterial poisons are already in the body and are producing symptoms. From the point of view of treatment, therefore, we wish to know how the antitoxin acts after the bacillus or its poisons have been introduced into the animal, and not only in cases where the injection of antitoxin precedes the inoculation of the bacillus or where it is injected mixed with the toxin. We cannot be said to know all about this part of the subject experimentally, but what we do know is not without its practical significance. Thus it is known that if the antitoxin be given after the toxin has been injected it is in many instances possible to save the animal, provided that a large dose of the serum is given and the interval after the injection of the toxin is not too great. The same may be said if the bacillus be inoculated instead of the toxin. Without further discussing this subject it may be said that the statement just made embodies the two great essentials of treatment of diphtheria by antitoxic serum—viz., that the injection must be made as early as possible after the disease has begun and that the dose of antitoxic serum must be a large one. Moreover, in testing the strength of antitoxic serum it has been found that if a dose is mixed with the toxin which is just insufficient to counteract its action, to save the animal a much larger subsequent dose is necessary, the size of the dose depending on the interval of time elapsing. Therefore, in the treatment of the disease it is much better to give a single large dose than two, three or more doses during the course of the disease, for these subsequent doses have not the same immunising or antidotal power as the first, when the disease has progressed. The essentials of treatment are therefore: (1) a large dose of antitoxic serum, reckoning in normal units; (2) which must be given as early as possible in the disease; and (3) which must be given in one dose and not subdivided.

We may now pass on to discuss the more clinical aspects of the treatment of diphtheria by antitoxin. It will be useful to begin with an account of the routine treatment we adopt at the hospital. As soon as the child is admitted into the diphtheria ward it receives an injection of antitoxic serum, the dose of which I will speak of presently. If tracheotomy is necessary at once the antitoxin is injected after it has been performed. In cases of faucial and pharyngeal diphtheria local treatment is also employed, usually consisting of a steam spray of bicarbonate of sodium, (20 grains to the ounce) every four hours, and a similar spray of corrosive sublimate (1 in 2000) also every four hours, so that the throat is sprayed every two hours. Instead of the mercury spray, swabbing the throat with mercuric chloride or zinc chloride in glycerine is sometimes employed. If there is a nasal discharge a douche of bicarbonate of sodium is used, and in laryngeal cases a warm spray of the same solution is used over the opening of the tube. At the early part of the year it was attempted to do without the local application of antiseptics to the throat, but several cases of glandular abscess of the neck occurred, so that they were begun again and no more abscesses have occurred. According to the general condition of the patient brandy and liquor strychninæ are given, and if there is a great diminution in the amount of urine liquor ammonii acetatis in two-drachm doses is given at frequent intervals. In cases of repeated vomiting peptonised food is administered or rectal feeding adopted. Otherwise the patients are on a milk diet.

Cases of diphtheria come under treatment at various stages of the disease. Some are admitted in a moribund state and die in a few hours; others are but little better and die within forty-eight hours. In such cases, which are usually laryngeal, the serious condition is readily recognised, and no treatment of any kind, with or without antitoxin, is of any avail in saving the life of the child. They are hopeless. Of the other cases the most important point to decide is how far they are already poisoned.

In judging of the severity of a case that comes under treatment the day of disease is the first point to be considered. It is not always a safe guide to the severity of the illness, for a child admitted on, say, the third day may really be more ill than one admitted later, say on the fifth day, and *vice versâ*, since there is such a varying degree of resistance to disease in individuals. Still, the day of disease is of significance, and any patient coming under treatment after the third or fourth day of illness must be considered as in a dangerous condition; and I might add now that it appears to me that the fourth day of illness seems, in the average of cases, to be about the limit of the efficacy of the antitoxin treatment. Some of these cases as first seen are so-called "mild" cases of pharyngeal diphtheria; a laryngeal case may also be mild at first, judging by the absence of symptoms of poisoning. But in a child it is frequently impossible to predict what will happen in a "mild" case of pharyngeal diphtheria; the membrane may spread and involve the nose and larynx, and it may do this even after local treatment has appeared to be efficacious, or later in the illness fatal syncope may appear. Similarly in a "mild" laryngeal case, in which tracheotomy has completely relieved the dyspnœa, it is impossible to foretell whether the membrane will extend to the bronchial tubes and kill the patient or not, or whether fatal cardiac syncope will occur or not. In such cases before antitoxin came into use, the patient always appeared to be in danger during the long convalescence. Other cases, however, are not "mild" when first seen, and the symptoms of poisoning which such patients may exhibit may be stated as great bodily depression, restlessness, vomiting, and diminution in the amount of urine or actual suppression. It would be going beyond my limits to discuss all these symptoms in detail. But it may be said that restlessness of the patient with repeated vomiting is a serious symptom. It precedes the fatal issue in many cases of diphtheria and is frequently associated with suppression of urine. The restlessness and the vomiting (which sometimes calls for rectal feeding) are obvious at the first examination of the patient, but the suppression of the urine is a symptom which is not so frequently attended to. So important has this symptom become to my mind that on seeing a patient for the first time I always enquire what amount of urine has been passed, the presence of albumin being quite a secondary consideration. As regards this point, for example, how frequently it happens that when the urine is found to contain one-third or one-half albumin, or even to boil solid, the apparently large quantity of albumin is due to the small quantity of urine secreted, to its concentration in fact. The amount of urine passed is not only an important fact to ascertain when the patient first comes under observation, but it is extremely useful for prognosis during the course of the disease. In practically all severe cases of disease the amount of urine appears diminished, but its gradual diminution during the first few days of treatment or its sudden diminution acts as a danger signal calling for active interference. In two cases I have in my mind now this sudden diminution of urine being recognised was actively treated by hot baths and the administration of diuretics (large doses of liquor ammonii acetatis) with the result of the passage of a large quantity of urine and the recovery of the patients. In other cases, however, no treatment is of avail. Severe cases of laryngeal diphtheria may exhibit these symptoms of poisoning, but in addition there are cases in which tracheotomy does not relieve the dyspnœa, and post mortem broncho-pneumonia with membrane extending down the small bronchial tubes is found.

In passing on to the results of the treatment of diphtheria by the injection of antitoxic serum I will present the subject under the following headings:—1. What difference has the antitoxin treatment made in the total mortality—i.e., the case mortality of the disease? 2. What difference has it made in the mortality in children under five years of age? 3. And what is the best method of applying the remedy so as to get the best results? I will, as I have said, give you my own experience at University College Hospital and compare the results obtained by the antitoxin treatment (in 1895 and 1896) with those obtained in the four previous years (1891-1894). The antitoxin treatment was begun at the commencement of 1895 and has been continued systematically down to the present time. In each case a

bacteriological examination has been made, into the details of which I need not enter, as the figures have to be compared with those obtained in the years before this mode of examination was performed. All cases were treated alike—viz., by the injection of antitoxic serum and by the local application of remedies, and by such general treatment as was necessary in the way of stimulation and feeding. The only difference in the treatment of the cases in 1895 and 1896 from that of cases in 1891 and 1894 was in the injection of antitoxic serum, so that the results can with fairness be compared. In a general hospital, as is well known, there is a larger proportion of severe cases than in the large fever hospitals, where with severe cases a large number of mild pharyngeal cases are admitted. More emergency cases (laryngeal) are also admitted into the general hospital in proportion to the fever hospitals. The case mortality of diphtheria in general hospitals has, therefore, usually been high; it is swelled by severe cases, both laryngeal and pharyngeal. This fact, however, is not really disadvantageous to the clinical investigation of the effect of the antitoxic serum on the disease; and, coupled with the smaller number of cases admitted and the opportunity of observing each in detail by more than one observer, it is an actual advantage at the commencement of the research. The following table shows the total mortality of all cases of diphtheria admitted into the hospital from 1891 to 1896, 1895 and 1896 being the antitoxin years:—

Year.	Cases.	Deaths.	Per cent.
1891...	62	27	= 41·9
1892...	60	20	= 33·3
1893...	105	39	= 37·0
1894...	64	25	= 39·0
1895...	75	21	= 28·0
1896 (Sept. 22nd)...	68	14	= 20·5

Thus from 1891–1894 there were 291 cases admitted, with 111 deaths, or a percentage of 38·1. In 1895 and 1896 (Sept. 22nd) there were 143 cases and 35 deaths, a percentage of 25·1. One year, of course, differs from another to some extent by the severity of the type of disease. It is seen, however, that the case mortality in 1895 and 1896 contrasts strongly with that of the previous years, and that the case mortality in 1896 was less than in 1895. It seems to me clear that the only factor which could have thus reduced the mortality in these years was the use of antitoxic serum. The explanation of the results in 1896 being better than in 1895 is that this year we have been using stronger serum than last year. I thought perhaps it would be interesting to contrast these figures with those obtained when the hopeless cases were deducted, reckoning as hopeless those brought into the hospital moribund or those dying within thirty-six hours after admission, in such cases no treatment being of any avail. The number of these cases varies in each year from five to eight, and the following table shows the results when they are deducted.

Year.	Cases.	Deaths.	Per cent.
1891...	57	22	= 38·6
1892...	54	12	= 22·2
1893...	97	31	= 32·0
1894...	57	18	= 31·6
1895...	68	14	= 20·6
1896...	62	8	= 12·9 *

* 130 cases; 22 deaths = 16·9 per cent.

This table, therefore, shows the same reduction in mortality as the first.

Diphtheria is most prevalent in children under fifteen years of age, and especially in those (from five to fifteen years of age) who attend school. In adults the mortality from the disease is slight; it is more in children between ten and fifteen years, but in children under five years it is very high, and may be reckoned as at about 50 per cent. It is necessary, therefore, to compare the results obtained by the antitoxin treatment in children under five years of age with similar cases occurring before the treatment was introduced. This table shows these results:—

Year.	Cases.	Deaths.	Per cent.
1891...	39	22	= 56·4
1892...	33	15	= 45·4
1893...	58	30	= 51·7
1894...	34	18	= 52·9
1895...	48	17	= 35·4 †
1896...	43	11	= 25·5 †

* Pre-antitoxin years, 164 cases, 85 deaths = 51·7 per cent. † Antitoxin years, 91 cases, 28 deaths = 30·7 per cent.

There can be no question, therefore, of the better results obtained in children under five years of age from the antitoxin treatment of diphtheria. The results in 1896 are better than in 1895, not because the cases have been less severe, for that has not been the case, but because the serum used has been better—i.e., stronger. We must look at the subject in another way. The figures already given deal with all cases admitted into the hospital, whether they are mild or severe or whether they are admitted early or late in the disease. Although the day of disease is not always an accurate criterion of the severity of the case, yet in summing up the results it is more practical than any other way of estimating the severity. I have, therefore, prepared tables comparing the mortality in cases admitted during the first four days of illness with those admitted on the fifth day or later, and great care has been exercised in estimating correctly the day of onset of the disease. The mortality in all cases of diphtheria (1891-94), according to day of illness, was:—

First to fourth day of illness: 156 cases, 58 deaths = 37·1 per cent.
Fifth day and later ,, 102 ,, 44 ,, = 43·1 ,,

These are the figures before the use of antitoxin. The following table shows the results in the antitoxin years 1895 and 1896:—

First to fourth day of illness: 97 cases, 15 deaths = 15·4 per cent.
Fifth day and later ,, 42 ,, 18 ,, = 42·8 ,,

It is thus clearly seen that if the treatment by antitoxin is employed in the first four days of the illness a great reduction in the mortality is produced. There is a great difference between a case mortality of 15·4 per cent. and one of 37·1 per cent. When, however, the treatment is delayed to the fifth day or later the injection by antitoxin makes no difference in the case mortality. I do not mean that antitoxin will do no good if the disease has lasted five days; but I am speaking now only of the total results, and not of individual cases. Similar conclusions are to be drawn from the results obtained in children under five years of age. Thus in 1891-94 the results were:—

First to fourth day, 90 cases: 49 deaths = 54·4 per cent.
Fifth day and later 54 ,, 28 ,, = 51·8 ,, ,,

while in 1895 and 1896 there were:—

First to fourth day, 55 cases: 11 deaths = 20 per cent.
Fifth day and later 33 ,, 16 ,, = 48·4 ,, ,,

The contrast between a mortality of 20 per cent. and one of 54·4 per cent. is very marked.

Reckoned according to this method the cases in 1896 have done better than those in 1895. For of all cases in 1896 (Sept. 22nd), of those admitted during the first four days of illness 13·7 per cent. have died, as compared with 17·3 per cent. in 1895; of those admitted on the fifth day or later, 35·7 per cent. have died, as compared with 46·4 per cent. in 1895. In children under five years of age in 1896, 16·6 per cent. of those admitted during the first four days have died, as compared with 24 per cent. in 1895; and of those admitted later, 50 per cent., as compared with 47·8 per cent. There has undoubtedly, then, been a saving of life in children under five years of life, and the better results in 1896 as compared with 1895 are again to be ascribed to the better serum used. The serum used in 1895 and the early part of 1896 was made at the British Institute of Preventive Medicine. During the last five months we have used serum kindly supplied from the laboratories of the Royal Colleges of Physicians and Surgeons by Dr. Sims Woodhead. The strength of this serum is about 4000 units in 5 c.c., and as this is a convenient amount to inject into a child it is more serviceable than when 40 c.c. have to be given in order to administer 4000 normal units.

In 1895 the strength of the serum used was not known, except that it was much less than that used this year. During 1896 only one case received as small a dose as 2000 units, four received doses of 3000 units, while the remaining cases received doses varying from 4000 to 16,000 units. We never now give a dose of less than 4000 units and more frequently give 8000. It may be claimed for these larger doses that they have still further reduced the mortality from that of last year and that we have had this year a minimum of cases of paralysis following the disease. In only three of the cases has there been evident paralysis, and one of these (a severe case of diphtheria) died in forty-four days from bronchopneumonia. Further experience is, however, necessary before the point whether large doses of the serum prevent the paralysis can be decided, but our experience this year would seem to tend to answer the question in the affirmative. No bad results have been observed from the use of the antitoxin. In the 143 cases in which it has been injected there has been no abscess, and an abscess can only result from carelessness in injecting the serum, such as want of cleanliness and the use of a dirty syringe. From the serum we are using now very few rashes have been observed and no case of joint pain, although last year a rash occurred in about 50 per cent. of the cases.

The beneficial results of the injection of the serum are not only seen in the tables of mortality which have been brought forward, but are also observed at the bedside. 1. It stops the growth of the membrane. In an ordinary pharyngeal case the effect is not usually seen for twelve or even twenty-four hours, and during this time the membrane may even spread. At the end of this period the spread of the membrane ceases and this either shrivels up and separates after a few days, or it becomes pultaceous and is washed away by the spray. The rapidity of disappearance of the membrane varies somewhat in different cases. In laryngeal cases a similar result is observed, and the ease with which those cases in which membrane has not already spread to the bronchi convalesce is sometimes remarkable—a result not attainable by any other treatment. Even in pharyngeal cases which are ultimately fatal the membrane rapidly disappears from the throat after the injection of antitoxin. 2. In no instance has it been observed that a case which was simply pharyngeal on admission became laryngeal and necessitated tracheotomy. This used to occur sometimes but has not been observed since the cases have been treated by antitoxin. More than this, cases have been admitted with pharyngeal diphtheria and laryngeal symptoms and have had antitoxin and recovered without tracheotomy. One case of a child this year was particularly worthy of note, as it was thought on admission that tracheotomy was urgently required. The patient received the antitoxin (a large dose) at night and was so much better in the morning that no operation was necessary and convalescence was rapidly established. 3. No cases have proved fatal unless they were severe on admission. 4. A day or two after the injection patients usually lose that earthy pallor which is so frequent in diphtheria, and their natural colour in part returns.

The injection of antitoxic serum being therefore of benefit to the patient suffering from diphtheria, aiding him in his struggle against the infection, how is the remedy best applied so as to get the best results? 1. As the result of experience, I should say never inject less than 4000 normal units of the serum. The dose ought not to be reckoned as so many cubic centimetres but as so many units. We are rather behindhand in England in this matter, but I trust it will not be long before the profession will be able to give a large dose in a small compass—i.e., 4000 or 5000 units in 5 c.c. 2. Make only one injection at the first time of seeing the patient. Do not go on giving small injections, but give all you want to give to the case in one dose. In the rare cases of relapse a second dose must be given. Give it in every case and do not wait till the case gets severe. 4. Lastly, give it as early as possible in the case. Do not "try other remedies" before resorting to it. And as the antitoxin does no harm it cannot matter if one or two non-diphtheritic cases have an injection. In future a good supply of strong serum will no doubt be obtainable, and, as I hope, will be the only kind of serum that will be permitted to be sold. If the bulk of the medical profession uses this we shall, I feel sure, find a great reduction in the mortality from the disease. If used in all cases, and early in the disease, it will be found a remedy of great value, lessening the anxiety both of the practitioner and the friends.

An Address
ON THE
MANAGEMENT OF PATIENTS.

Delivered before the Leamington Medical Society on Oct. 7th, 1896.

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GENTLEMEN,—One of the characteristics of the closing years of the century in England is a restless tendency to review and scrutinise the methods by which the daily work of our common life is carried on. In this way, to speak figuratively, a beam of electrical search light is turned in succession upon all of us. Nothing is left alone. Everything is re-opened or uprooted in order to ascertain if there are indications of progress. If, as Sir Andrew Clark used to say, we are all the products of the age we live in, none of us can have escaped from the ordeal I have just mentioned. In discussing the subject of my address to you to-night I hardly know whether my remarks will be regarded as misplaced or hypercritical or whether they will take their place as a serious review of one phase of our conduct as medical advisers amongst the public. I shall have to consider my subject in relation both to ourselves and our patients, and my object is to lay before you some remarks upon the professional management of the sick.

I do not know that any specific teaching is anywhere given on this matter. Indeed, the subject is one that can hardly be taught by book or lecture. It is purely clinical, but the teaching of the multiform phases of it can hardly be conveyed in any number of hospital clinical lectures. Neither can instruction in it be given, save, occasionally amongst the poorest classes, at the bedside in private life. The fact is, that we have to teach ourselves to manage our patients. Some men may carry into practice the precepts, and others may perhaps imitate the manners or peculiarities of their teachers. The latter proceeding may, however, very ill become the individuality of the imitator, and make him simply ridiculous. Many of us have witnessed, and laughed at, the actors in our profession who play such parts. Again, with much professional knowledge some of us may fail altogether to acquire the power of managing our patients, and I much fear that examples of such inability are nowhere far to seek. Some general propositions relating to this subject may be laid down. As I have remarked, each of us has gradually to acquire the art of managing patients. The management of a patient includes treatment in all its forms. It is possible to prescribe for, without being able to manage, the sick, but the results in such a case are not satisfactory. The patient may often be readily managed, but the practitioner fails to conduct him well through his illness. Again, the patient may be difficult to manage, and yet the practitioner, by tact and skill in management, may accomplish all that is needed (*jucunde*). This quality of clinical management has been of late facetiously termed a "bedside manner," and it is not misnamed so long as it implies both correctness of mien and an absence of affectation. It may be affirmed with confidence that the most successful practitioners of medicine are those who best manage their patients. In discussing this subject we may, first, consider the characteristics of divers classes of patients, and, secondly, note the qualities that make for successful management of them in the practitioner.

First, with respect to the patient. Amongst the poor and ignorant we must expect to find credulity, and not seldom many prejudices. Often, indeed, we meet with a degree of patience and unquestioning submission which is very touching and well calculated to claim our warmest sympathy. It may be easy enough to command confidence amongst these classes, but we must always and everywhere be worthy of it. In better educated patients of a higher grade in society, we may still meet with prejudice and credulity, opposition to our methods, and even disloyalty. But, not seldom, we find

amongst these some of the most agreeable and amenable patients we have to deal with. Some of the greatest difficulties are encountered in managing patients of the wealthy and upper classes. We might naturally expect to find not only fewer prejudices and less credulity in this stratum of society, but also greater patience and forbearance, together with a mental attitude favourable to recovery. How often, alas, do we meet with very different qualities in such patients. Knowledge sufficient to puff up, sententiousness, prejudices, "fads," and a general bias respecting many matters of medical import. Add to these airs of patronage, an assumption of omniscience, distrust, disloyalty, ingratitude, and not seldom stinginess. In all grades of society we have, further, to deal with patients mentally distempered and hypochondriacal, and some of these make great claims on our clinical tact and management. Having said so much respecting various classes of patients, I must not omit to add that some of the faults and frailties alluded to may be venial, and possibly provoked by the manner and conduct of the practitioner. In our daily work our manner should be practically the same with all classes of patients. The poor and humble are fully appreciative of gentle manners, and there should be no manner for the pauper that may not be exhibited at the bedside of a peer. Therein lies part of the splendid catholicity of our profession, and in all departments of our hospital schools of medicine the student should learn good manners as well as good physic from his teachers.

In considering, secondly, the qualities that command successful management of patients at our hands I shall direct attention to such as I conceive to be important, if not essential. I lay particular stress upon a natural aptitude for the occupation of treating the sick. To practise it well a man must have an inherent love of his profession. I assume that the practitioner has been soundly trained in all branches of his art. I wish I could equally assume that his earlier and preliminary education had been in all ways adapted for his readier comprehension, not only of the difficult problems of medicine, but of many that relate to our complex social life. For such an education I prefer the old term of "the humanities," and, in my belief, our profession suffers at the present time from no greater deprivation than the loss of thorough training on those lines which should be compulsory for all who aspire to enter it. We hear much about medical ethics in these days and the need of some authoritative body to appeal to, and to regulate such matters. I cannot doubt that if all the entrants to the portals of physic brought with them the education and instincts of gentlemen we should hear of no ethical difficulties and require no appeals to any such board as is proposed. Next, I would urge that in our management of the sick our manner and conduct should be as simple, direct, and as natural as possible. We are not to pose or to imitate anybody; we have to try to put ourselves in the patient's place and regard things from his point of view. As our knowledge of human nature grows, and as we gain insight into the varying environments and try to realise the temptations of patients in the several social strata, we should become increasingly prudent and sympathetic, and thus see more clearly the line of tactical conduct requisite in each case.

One of the main objects in successful management of the sick is to secure the patient's confidence. The psychical influence of the mental attitude thus established is one of enormous, though little understood, value in all therapeutic efforts. It is the attitude which best promotes recovery, and we gladly coöperate with it. But all people have not faith in us or in our art. The qualities of faith and trust are absent from some minds or but little developed; and not seldom do we meet with this distemper in the most subtle and highly trained minds. I regard such a condition (*ἀπιστία*) either in respect of worldly or spiritual concerns as a mental flaw somewhat akin to colour blindness. We find some persons rejoicing in this disability, while others bitterly regret it. In any case our duty is to act tenderly and to exhibit more, and not less, robustness of belief in our own skill and our art. Such conduct on our part is sometimes contagious and often actively inspiring in seemingly hopeless cases presenting this infirmity. This leads me to say that it is not our duty to pose at the bedside as scientific men. The physician is an artist whose skill is derived through various sciences from careful and accurate observation. He is, or ought to be, a human minister to the ills and needs of the sufferer before him, and not a pedantic professor of abstract physic. In thus endeavouring to secure the confidence of patients we are sometimes exposed to temptations to deviate from a strictly honest and honourable course. We know that such temptations are not always resisted by some men in our ranks, and an easily acquired popularity and a measure of success may be thus achieved. I have, however, lived long enough to learn that such a course never succeeds in the long run, and I sometimes look back and see those who once "flourished like green bay trees" now discredited and left far behind. Confidence may be gained, and is always strengthened, by a close and careful attention to the minutest details of the case before us. All hesitation and appearance of uncertainty is to be strenuously avoided. A medical man who cannot keenly regard his patient, eye to eye, with firmness and directness, is hardly likely to succeed. And no less must he similarly regard every one, relations, friends, or nurses, who are dependent on, and should be trustful of, him. With this must be associated gentleness, promptness of decision, a power of command, and a perfectly disciplined temper. All these qualities are requisite in those who have to guide and lead others—naval or military qualities we may call them—but always without any of the overbearing conduct of the martinet. Brightness and cheerfulness, without levity, are always of value in enlisting the sympathy of the sick, and the inlet of a little wit or humour on appropriate occasions does more good than some remedies. Many men of excellent ability and professional skill fail to impress their patients favourably because they lack all sense of humour, and have no power of command or of methodical adaptation of means towards the end in view. Their bedside manner is bad. They make their diagnosis and prescribe, but the patient and the attendants are left in uncertainty both as to the exact opinion formed, and the precise methods enjoined by the practitioner. Casual directions, with permission to do this or that, or to take this or that, fail to impress anybody, and the result is unsatisfactory. Dogmatism, founded on sound principles, is as good for patients and their friends as it is for students in the lecture room. We must be definite and we must be lucid.

In meeting the ignorance and prejudices of the poor we have to be gentle and forbearing, to show them a more excellent way, and to win them by close personal attention which is always irresistible. Hospital discipline is beneficial to many of them, and it often reveals, for the first time in their lives, the happiness of having to do what they are told and not what they like. In combating the prejudices of patients who, though not well-educated, are not ignorant, it is well to recognise—or, if not, at least to assume—that they have studied the subjects on which they hold strong opinions. Some of these prejudices rest on very shallow foundations, and unless there be a condition of mental distemper—such as occurs in persons who are crazy about teetotalism, vaccination, vivisection, homœopathy, vegetarianism, or the Contagious Diseases Acts—many such scruples may be overcome. I have even known the *argumentum ad crumenam* to be effective in combating an anti-vaccinationist who declined to pay an extra premium for life assurance on account of his peculiar views, and who thereupon submitted to the lancet-point next morning. It is sometimes possible to manage a wilful patient by falling in with his views so far as is not inconsistent with the best interests of his case. Such a man will occasionally submit at once to treatment on lines which commend themselves to him and on no others. If the proceeding be in no way detrimental and not distinctly contra-indicated, we may now and then thus temporise and lose no hold on the patient, whatever be the issue. He will probably in the case of failure readily submit to more orthodox treatment.

A wide knowledge of our common humanity in all its aspects and workings is of much assistance in managing different classes of patients. It is necessary to know how our several patients live, to know how they spend their days, how they eat, drink, work, and amuse themselves. I have known strange difficulties to arise from ignorance or misapprehension of some of these matters. It may lead to very undesirable prescriptions both of food and physic or of health resorts. Thus, I have known patients who have been ordered to drink Marsala instead of sherry, and of a connoisseur in wines being advised to take Australian or Hungarian "Burgundy" instead of the finer vintages of Bordeaux. To say nothing of the senselessness of such prescriptions, they argue a want of nice perception of the instincts, refinements, and habits of a class of patients, who, although they may chance to be luxurious,

or even perhaps indulgent, in their appetites, exist, and will continue to exist, and who when they suffer demand treatment at our hands. When we prescribe for the poor we must have regard to what they are likely to procure and appreciate, and if we prescribe for wealthy and refined patients we must know the habits and customs of gentlefolk, otherwise we lose the confidence of our patients and fail in intelligent management of them. We are bound not to offend our patients either in food or remedies. I am of the opinion that many of our younger brethren now err in two directions in the matter of prescribing medicines. They either administer drugs made—they know not how nor where—in tabloid form as arranged by some dealer in chemicals, perhaps in Germany or America, or they compose a prescription, not seldom of incompatibles, whose flavour would disgust even a South Sea Islander. I regret to say that with what is commonly regarded as progress in knowledge of the intimate action of drugs I have witnessed a distinct falling off in the ability to write or compose what are called elegant prescriptions. I attribute this result to several causes, amongst which I will mention a generally lessened belief in the efficacy of all drugs, a faithlessness which I deem quite unwarrantable and due to ignorance of their actions; an unworthy reliance on the dealers in chemicals who presume to tell us what remedies and preparations of theirs we should employ; neglect of study and the use of the British Pharmacopœia; and the habit of learning practical pharmacy in laboratories or in places where economy and dispatch are reckoned of more importance than elegance or nicety. There is now no excuse for exhibiting distasteful medicines of any kind, and we can hardly wonder that some patients absolutely refuse to take them and are thereby shaken in their confidence in the skill and art of their advisers.

The question of recourse to a second opinion in grave or puzzling cases of disease is one which occasionally has to be met, and which may much concern the rightful influence of practitioners in conducting the management of their patients. The omniscient and infallible man is not commonly the most trustworthy or dependable in our ranks. There should be no hesitation in yielding to the desire for a second opinion in many cases which, if not obscure in themselves, are still but slowly amenable to treatment, and in which the patient himself is anxious to have further advice. As a consultant myself I may be credited with a bias in this direction, but I am now regarding matters only from the patient's point of view, to which due attention should be paid. There can seldom be real difficulty in falling in with such natural desires, and if a wholesome comradeship exists, as it should always do, in every medical community, and expense is no material consideration, I can conceive no adequate reason for resisting such wishes on the part of our patients. One almost always derives inspiration and satisfaction from such consultations, and it is well to show that we have no fear of our work being reviewed by those whom we should regard as able to criticise it. Confirmation of our opinion can only increase our patients' confidence in us, and help us to conduct our cases more satisfactorily in all respects. To share responsibility, too, in the treatment of grave cases is always a relief to men duly impressed with the seriousness of their calling. One hears of faults on the sides of consultants. I do not say they do not exist, but I feel sure the consultant who commits them deliberately will have but a short-lived reputation in that sphere in which it should be his best ambition to shine—viz., amongst his professional brethren.

It is not always easy to steer clear of difficulties with the better classes of patients. Many of them are disloyal to their advisers, and use them as much or as little as they choose. The loss is theirs, since they forfeit the best sympathies and efforts of their attendants, but they discover this too late. It is hard, too, to be patronised by the wealthy who may be effusive and gushing when in sore trouble, but haughty and imperious when restored to health. Our course is to maintain our dignity and to remember always what is due to us as members of a great profession. It is not for us to fawn in any servile fashion, or yet to submit to any measure of indignity. We must exhibit always the courage of our opinions and stand firmly by what we believe to be right against all allurements and any fear of giving offence. We shall then hold our own and command respect. This will demand tact, but with this, supported by good breeding and well-controlled temper, we shall certainly win the day. We have to learn to be "all things to all men" without making any sacrifice of right principle. This can be done, and it is done every day by those who have well acquired the art of managing their patients.

It is often a great advantage to be skilled and interested in matters outside our own sphere of work. Such knowledge and dexterity themselves often open the door to men whose professional knowledge may not be of the highest, but who commend themselves honestly and pleasantly on other grounds to their patients. They will often succeed better than the solemn medical drudge who is learned in the last new methods and reads little beyond medical journals and medical literature, old and new. I do not in any way decry the constant study of all that happens in our profession; we must maintain that and do more. We should have some hobby of our own, peruse varied literature, and have wide interests in men and things. We shall thus be better equipped and come with brightness and freshness, as well as with "healing in our wings," when we approach the bedside of the sick and ailing.

Travelling is of value in widening our interests and sympathies and enlarging our knowledge of humanity, and it thus enhances the value of our opinion both on medical and other subjects. With all this we need yet more. We have to be circumspect and worthy to retain inviolate the private confidences committed to us. "*Quod tacitum velis, nemini dixeris*" is a motto to be ever before us. Grave matters relating to our patients are often within our knowledge. We note them and seal them up from the busy, inquisitive world around us. Modern society, with its prying and impertinent agents of the press would have us yield up many secrets confided to us, and then, after gossiping over them, prudishly cry shame on us for disclosing them. Some few amongst us are easily seduced and trapped by the wiles of the newspaper man, some innocently, but others only too willingly. We should know but one rule in this matter and it is this: to show such persons outside our doors, politely but firmly and promptly. In this manner we may yet hope to save for our profession some shreds of respects in these terrible days of publicity and mawkish sentimentalism. The bulletins relating to patients which appear in newspapers are now not seldom so impertinent and improper that they constitute a heavy disgrace to such men as issue and sign them, and yet there is no kind of difficulty in checking this unseemly procedure. Such conduct drags down our calling to the rank of advertising tradesmen, and small wonder if decent people seek to belittle it.

Gentlemen, I have done. Pardon me if I have spoken warmly. Some one must speak out in these days of shameless pushing and self-seeking. *Quieta non movere* shall be no policy of mine at such a time. I should be unworthy of the school I hail from, and unworthy of the venerable college I serve, if I passed by such matters as I have referred to in silence. I venture here and now to commend what I have said to your serious consideration. I will also hope that you may approve my very general and somewhat desultory remarks upon the important subject I have endeavoured to treat this evening.

THE Book and News Trade Exhibition which opened at the Royal Aquarium on Oct. 13th will remain open until Oct. 24th. The exhibition is on a scale of magnitude exceeding that of last year. Leading publishers and newspapers are fully represented. Pictorial work and machinery in operation are some of the attractions of the show. The whole of the space in the Aquarium area and galleries is in requisition, and the show is well worth a visit from all interested in learning how the modern book and newspaper are produced.

THE WATER SUPPLY OF WORTHING.—The authorities at Worthing have just received from Dr. Dupré an analysis of the water from their newly-constructed works. The water is described as clear, colourless, inodorous, of remarkable organic purity, and showing no sign of pollution by sewage or surface drainage. It would be better if less hard, but it is a first-class drinking water. The report adds that it is worthy of remark that whereas this sample corresponds in nearly all respects very closely with the samples taken in May, 1895, it differs in many respects from the two samples taken on Jan. 27th of this year. The January samples contained considerably more chlorides and considerably less nitrates, and it might be well, Dr. Dupré adds, to investigate the reason of this variation, since comparative constancy of composition is generally a great characteristic of pure deep well water

Abstracts
OF
INTRODUCTORY ADDRESSES, ETC.,
DELIVERED AT THE
LONDON AND PROVINCIAL MEDICAL SCHOOLS
AT THE
Opening of the Session, 1896-97.

UNIVERSITY COLLEGE, LIVERPOOL.

INTRODUCTORY ADDRESS BY SIR WILLIAM O. PRIESTLEY, M.D. EDIN., M.P.

SIR WILLIAM PRIESTLEY said that he had been invited to give the address at the opening of the session of University College, Liverpool, for one reason, as stated by the excellent Dean, that his fellow graduates might have the opportunity of giving a Lancashire welcome to their Member of Parliament. He had gladly responded, not only because of the cordial nature of the invitation, but because of the interest he took in medical education and appreciation of all that had been done to further it by the various colleges forming the Victoria University. By the invitation of the originators of the Victoria University he had been invited in its early days to take part in making the statutes and regulations and had been one of the first examiners for medical degrees in the University. One of the most striking features in the organisation of the several colleges comprising the Victoria University was the great and laudable generosity and public spirit displayed by local benefactors, who had subscribed largely to endow them with appliances for successful teaching. He believed there was latent public spirit in London, but, if it existed, it did not take so distinct a form. What was everybody's business became nobody's business, and great institutions like University College and King's College were languishing for want of funds, while the provincial colleges found generous benefactors concentrating attention upon them and giving endowments which were the envy of their metropolitan sisters. It was to be hoped that the Government, taking cognisance of this effort in local self-help, would find in it an additional reason for further pecuniary aid in conjunction with the metropolitan colleges. Such Government aid was urgently needed both in the London and provincial colleges in view of the increased cost of scientific education and the necessity of making it as cheap as possible to the students. It was the Government aid in Germany and elsewhere on the Continent which enabled the great teaching institutions there to compete at such advantage with the universities and colleges of this country and to outdistance them in scientific and industrial products.

The duty assigned to the lecturer of the day was a complex one, as he had been informed his audience would consist of medical students, medical men, and ladies and gentlemen who were not medical practitioners. He was expected to say something also on various questions in medical politics. To the medical students, first, he would say they had chosen a profession which deserved all their reverence and their utmost efforts to cultivate. Unless impressed with the true dignity of their calling—studying and practising medicine only as a means of living for mere gain—they would be little better than Bunyan's "man with the muck-rake," engrossed with ignoble cares, content with raking together straws regardless of the golden crown within their reach. Medicine fulfilled in the highest degree the teaching of that philosophy which holds that it is better than aught else to do good—better than the occupations of ancient philosophers who occupied themselves with endeavouring to attain unattainable frames of mind or in discussions as to whether pain was an evil. Instead, the province of the physician was to relieve pain and cure disease and the highest efforts of his intellect were directed to these objects. Great as were the services rendered to the commonwealth by the votaries of medicine, they had not yet received that recognition from the State which was accorded to other professions. To the soldier, the lawyer, and members of the Church were open the highest positions in the State. They might become Privy Councillors and peers, and artists and poets might proceed to these high distinctions, while medical men were as yet excluded and minor distinctions were often grudgingly granted. And yet it might be said that medical science had brought quite as much advantage to the State and to humanity in general as the most successful of military campaigns or the wisest legislative measures. Vaccination, notwithstanding its detractors, had saved more lives and prevented the disfigurement of more people than those who had been sacrificed by the most sanguinary of wars, and the introduction of anæsthetics and of the antiseptic method in surgery had brought blessings to mankind which could scarcely be exaggerated. His illustrious friend and colleague, Sir Joseph Lister, had lately told them the story of the introduction of antiseptics in the treatment of wounds in which he himself had borne so glorious a part, but the effect in midwifery had been equally remarkable. At one time puerperal fever was so rife in lying-in hospitals that it became a question whether they should not be abandoned on account of the great mortality resulting. Now this form of fever was almost abolished in maternity hospitals. He had calculated that in ten years since the use of antiseptics in midwifery practice 3000 lives had been saved of women in the acme of their maturity and when their services were most valuable to their families. These figures were taken from available records in Europe and America. This was no mean achievement in preventive medicine and was only an illustration of what was doing in other departments. The medical student who would take part in this great work must give his mind absolutely and earnestly to its study and be a student to the end of his life, for there was always something new even to the mind of the most mature physician which he must be prepared to utilise for the good of his patients. The first thing was to be well grounded in general education and in the preliminary sciences auxiliary to medicine. Then came the time for applying this knowledge to the cure of disease, and one of the most important requisites was to get a right estimate of the scope and value of the medical art which was so imperfectly and erroneously understood by the non-medical public. The general impression seemed to be that an ailment or disease was something in the human body which could be neutralised as an acid by an alkali, and that the medical man has only to be in possession of the proper remedy for each one and then he was fully furnished for the practice of his profession. Few people had any knowledge of the *vis medicatrix naturæ* which preserves the body in health and helps to recover it when stricken with illness. They were not aware that although some diseases were produced by specific poisons the largest portion were not so, but arose gradually by deviations from natural laws, self-indulgence, and vicious modes of living, the result being that anatomical changes and degenerations took place in organs which ended in their impairment and destruction. Further, the student had to learn that these pathological changes were attended with a diversity of symptoms almost protean in their character, and that there was no exact ratio between the gravity of the disease and the urgency of the symptoms. A troublesome cough might be due to a common catarrh or be associated with a deadly pneumonia or a phthisis. The scientific study of medicine was therefore very complex, and when in addition it was found that the effects of remedies on different diseases and on different people were never quite the same, it would be readily understood how special training, in addition to a well-balanced mind, was requisite to truly appraise the value of a remedy. The way in which educated and even intellectual people were led astray by the various heterodox systems of medicine seemed to him to be due to the inveterate habit of expecting to cure disease by prescribing for its symptoms, and an imperfect knowledge of the scope and value of the medical art led the public to patronise nostrums and patent medicines which did more to enrich the vendors than promote the public good. Medical men should in and out of season try to inculcate a wiser and a better way and not pander to the prejudices of their patients. They should teach them that most minor ailments will often get well by the unaided power of nature and without medicine if proper conditions are observed, and, above all, they should teach them that upon

themselves, upon their self-denial, and the knowledge they are willing to acquire, to a large extent depends the prevention of many ills and ailments where ignorance holds sway. It was lamentable to think that so long as public knowledge lags behind the wise and prudent must suffer with the ignorant, and children are especially sufferers from the effects of ignorance. Vaccination, for instance, may not have achieved all that was expected of it by some people, and might be inefficiently or badly performed; but, seeing the great good it had produced, it would be as irrational to abandon it as to stop railway travelling because every year a certain number of people were killed or maimed by the way.

In reference to some subjects in medical politics on which he had been asked to speak, he would say that in the interests of the poor he believed there was an urgent need for the better education and registration of midwives, and medical men ought to approach the question with the public interest mainly in view and not primarily from a professional standpoint. There was great harm resulting to poor women from being attended by incompetent midwives. There were from ten to fifteen thousand practising in England and Wales, many of whom were entirely uneducated. In most countries in Europe midwives were controlled by the State and did not interfere with medical practice. They were, however, always controlled by medical men and limited to their proper duties. An infringement of the rules imposed upon them was visited by penalties. He believed that some such system introduced into this country would be a great public good, and if properly regulated midwives would not invade the province of the medical man. As to imposing the duty of so-called medical defence on the British Medical Association, he was one of those who thought it would be best to entrust such duty to a separate organisation. At present the association comprised all ranks of the medical profession for the promotion of science, but if it became an organisation for prosecuting quacks and for increasing the remuneration of medical men it became doubtful whether the leaders in the profession could continue as members. The association would certainly be lowered in public estimation, and there were questions of finance which militated strongly against such a proposal.

Sir William Priestley then said something on the question of a teaching University for London, remarking that although the London University had most distinguished men among its graduates and submitted candidates for its degrees to one of the most formidable examinations in the three kingdoms, the best teachers felt that examination did not do all that was required in the interest of education. There were the practical training and personal association with competent teachers, which were even more important elements in the mental development of students than the mere preparing for examination, and unless the teachers took part in the examination of their own students these last would go to the "coaches" or "grinders" for their needful preparation. He hoped some such system of combined teaching with examination as prevailed on the continent, in Scotland, and in the provincial colleges of England would eventually find place in London. So long as teaching had to follow and be subservient to examination, instead of the contrary, the efforts of the professors were dwarfed and originality was not allowed fair play.

In conclusion Sir William Priestley asked permission to say a few words to the ladies present, and told them that the principles which led the illustrious Sir Joseph Lister to introduce antiseptic surgery into practice were also applicable to domestic economy. Germs of diseases were introduced into homes where sanitary conditions were imperfect. The putrescence of meat, fish, and eggs, the sourness of milk, and the mould on bread were all produced by attacks of microbes, and so by bad and unscientific conditions in pantries and larders great waste was produced. It was not necessary for every woman to become "a new darn on an old blue-stocking," as the "new woman" had been defined, so to master some general principles of science as to guard her household from many forms of illness and from waste of food and drink. It was not generally known that the largest proportion of choleraic attacks which carried off so many young infants was due to pollution of milk after it entered the household and not to faulty secretion in the cow. He believed if in girls' schools some knowledge of housekeeping on a scientific basis were imparted it would be more useful than some of the so-called accomplishments for which the girl had little aptitude and would do more good to the State than if women were admitted to the franchise and to the privilege of sending members to Parliament.

ST. VINCENT'S HOSPITAL, DUBLIN.

INTRODUCTORY ADDRESS BY DR. MCHUGH.

THE following is an abstract of the address delivered by Dr. McHugh:—

"In accordance with the mandate of my colleagues the duty now devolves upon me for the third time of delivering the introductory lecture at the opening of this the sixty-third medical session of our hospital. I hope to be permitted to deal with a subject which is not only of great interest to medical men, but which also most vitally concerns every member of the community. I allude to the endeavours which have recently been made—and which, it is to be hoped, will in the future be more actively made—to check the spread of infectious diseases by means of their complete isolation and treatment in hospitals specially provided for them. This is a question in regard to which it must be confessed we are sadly behindhand in Dublin as compared with the principal centres of population on the other side of the channel.

"The power which the infective fevers, as a rule, possess of disseminating themselves through the community by this transmission of a poison from person to person is what we call contagiousness. In some cases this process takes place more directly through the air, and in others more indirectly through the contamination of sewers, of drinking water, or even of milk and other articles of diet. But by whatever means it be effected it is well known that a single case may act as the starting point of a whole epidemic. I may take as illustrations two well-known diseases at present very widely diffused throughout this city. The contagious virus of typhoid fever is contained mainly in the evacuations of the patient; and so virulent are these that the discharges from a single case of this disease may serve to infect a large area both as regards sewerage and water supplies, thus leading to many fresh outbreaks. The infective poison of scarlet fever, on the other hand, is found to reside chiefly in the scales which peel off the skin during the period of convalescence. Every patient, therefore, in the stage of recovery from scarlet fever is apt to spread the disease broadcast, throwing off the poison in its most virulent form during his convalescence—that is, at a time when he must be most active in distributing it. With a knowledge of these facts, and with a realisation of their full import, who can estimate the enormous gain to the public, both in this and future generations, if diseases like typhoid fever and scarlet fever could be placed and treated under such conditions that the contamination of surrounding media would be impossible? It is evident that if these conditions could be arrived at the further dissemination of the poison would cease and the diseases would be gradually stamped out. In order to compass this end it is necessary that all cases of infectious diseases occurring in a given district should be removed to special institutions, in which they would not only be treated under conditions most favourable to recovery, but in which, also, care would be taken that all discharges or emanations from them should either be destroyed or rendered innocuous by disinfection. Institutions of this kind are commonly known as isolation hospitals. In constructing them it is essential to provide one or more separate pavilions or blocks for the reception of each class of disease and for no other. They require an efficient ambulance service for the removal of patients, and they should be always in readiness to cope with any sudden emergency. The disinfection of infected dwellings, &c., is, of course, necessary as a supplementary procedure, and, above all, the loyal coöperation of the medical profession and of the public is required in the notification of each case to the proper sanitary authorities.

"Amongst the infectious diseases which we may be said to have constantly with us scarlet fever stands out prominently, not only on account of its severity, but also because it offers, perhaps, the greatest probability of ultimate extirpation by the method of isolation. As it has also made its presence somewhat obtrusively felt during the past few months a more detailed reference to it may not be out of place. I have already alluded to the manner in which

the poison of this disease is distributed by means of the abundant scales shed by convalescent patients. These scales are apt to be disseminated through the air in the form of fine dust and to cling to articles of clothing, books, furniture, &c., and so tenacious is the poison that for several years afterwards the disease may be contracted from such infected articles or dwellings. It cannot, therefore, be a matter of surprise that this disease, besides occasionally assuming an epidemic form, should have established itself on a permanent basis amongst us. It has been estimated—and that on the very moderate basis of allowing only fourteen days of contagiousness for each case—that London has hitherto maintained a permanent stock of 2000 centres of infection; and it may be affirmed that constant or continuous infection, with more or less numerous foci, is kept alive in every town of over 50,000 inhabitants. The remedy here called for is sufficiently obvious. The reduction of these centres of infection to a minimum, if not their complete annihilation, should be attempted, and that by the means already indicated—namely, the prompt removal to hospital of each case discovered, combined with immediate disinfection of the dwelling, clothes, &c., of the affected patients. When I mention that in its early stages this formidable disease is only slightly contagious it will appear that there is every possibility that these procedures, if rigidly and invariably applied, would ultimately succeed in eradicating all sources of infection.

"But devoutly as such isolation is to be wished in the case of scarlet fever it is no less imperatively called for as regards such dread diseases as diphtheria, small-pox, and typhus and typhoid fevers. It may be argued that, owing to the large mass of patients to be dealt with, the practical execution of this plan is beset with great difficulties. Granting that this is so, there is no reason why an attempt should not be made to apply it to as large a proportion of the cases, especially those of the more serious forms, as possible. We have abundant evidence that determined endeavours in this direction are at present being made in England and Scotland, where in many of the principal cities they have succeeded in isolating from 70 to 90 per cent.—and in some actually all the cases of scarlet fever arising within their boundaries."

[Dr. McHugh concluded by examining the local arrangements for dealing with infective fevers, which he found to be quite inadequate.]

"In addition to the Cork-street and Hardwicke Hospitals," he said, "which take rank as special fever hospitals, there are fever departments in no less than six of the general hospitals and, I understand, in one private hospital. This multiplicity of infected centres alone carries with it, for obvious reasons, a strong condemnation of the whole system. It is requisite, again, according to modern ideas, that in every fever hospital separate pavilions should be provided for the isolation of each type of fever. How can this be effected when the fever department in our general hospitals consists simply of the wing of a building which admits all classes of medical and surgical diseases, or, at most, of a small detached block in close connexion with it? In these institutions, also, the visiting medical staff is the same for both the general medical wards and the fever wards. The resident medical officers and pupils and the students attending pass freely from one section to the other, and the nursing administration is common to both. The existence of such adjuncts to general hospitals is a relic of times which, though not very far distant, must in this respect be regarded as barbarous, when fever cases were admitted freely and indiscriminately into the general wards and occasionally formed an actual majority of the patients. Such a system, of course, could not last, but it was not until 1881 that the municipal authority of Glasgow undertook its full responsibility by resolving that all classes of citizens suffering from infectious diseases should be treated in hospital without any charge being made therefor—thus dissociating the treatment of infectious disease from all social depreciation, whether of charity or pauperisation.

"Dublin is fully a generation behind them. Our local municipal authority cannot, therefore, be accused of undue haste in adopting their report of January, 1895, recommending the provision of isolation hospitals for Dublin. This report was, I understand, founded on the recommendation of our eminent medical officer of health, Sir Charles Cameron, who suggested that a representative board, somewhat similar to the London Metropolitan Asylums' Board, should be constituted to act as the local sanitary authority for the county of Dublin. This Board, he proposed, should consist of representatives nominated proportionately by the Corporation of Dublin, the three Unions, the Kingstown and Blackrock Town Commissioners, and the various suburban townships. It should be empowered to exercise control over hospitals for infectious diseases, to erect and equip new ones, and, in short, to take all necessary steps to apply the principle of isolation in the manner I have indicated.

"When this reform was first recommended by the committee of the corporation it met, as I have said, with strong opposition from an unexpected, though influential, quarter. It was believed that the establishment of special hospitals for fever would be prejudicial to the interests of medical education. I maintain that the public advantage and the advancement of clinical study, instead of clashing, go forward hand in hand. The licensing bodies already require the attendance of students at fever hospitals, and as far as the student, therefore, is concerned the only change will be to substitute for the fever department of a general hospital a special fever hospital ten times the size and with ten times the amount of material for clinical instruction. It will be difficult, I think, to convince any unprejudiced person that this will be to his disadvantage. I may pass over more trivial matters and come at once to the only objection made to the proposed scheme which, in my opinion, deserves serious attention, that is, the question of expense. On this point I may remark that it is easy to over-estimate the expenditure required and that if the Board were constituted on the lines originally laid down by Sir Charles Cameron the public would have in the representation of all classes of the community upon it the surest guarantee against extravagance. The question of expense is one which affects every sanitary reform and might be equally well held to be an objection to main drainage or the cleansing of the streets. It should also be remembered that as the primary object of isolation hospitals is to prevent infection from spreading, the cost of maintaining them will be relatively less and the benefits resulting from them relatively greater in proportion to the excellence of the provision made for the immediate admission of patients and the advantage taken of these facilities by the public. The citizens must, in fine, weigh the advantages to be gained against the monetary sacrifice they are called upon to make, and they cannot fail to come to the conclusion that it is not only wiser, but in the end more economical, to deal with this question in a broad spirit than to incur all the expense, misery, and death—not to speak of the trading losses—caused by the prevalency of epidemic diseases amongst us."

[Dr. McHugh then quoted in support of this view Dr. Boobbyer, the medical officer of health of Nottingham, and Sir Henry Littlejohn, the medical officer of health of Edinburgh, and concluded with these words:]

"From end to end of the sister island they are engaged in an active crusade against the existence of these diseases. The sources of infection are being diligently sought out and extirpated one by one; and this is done, it must be remembered, as a matter of public policy. The appeal is, in this instance, not to the open-handed charity of our fellow-citizens, but rather to their instinct of self-preservation; and in bringing these somewhat lengthy remarks to a close I may express the hope that we shall soon witness a renewal of activity as regards this question on the part of our representative bodies—an activity which will be directed strictly in the course marked out for it by the canons of sanitary law, which will be consistent with the humanitarian spirit of the age, and which cannot fail to be productive of immeasurable good to the whole community."

DIPHTHERIA IN A COTTAGE HOSPITAL. — At the meeting of the East Grinstead urban council on the 7th inst. some discussion took place as to the action of the medical officer (Mr. Wallis) in taking three cases of diphtheria to the cottage hospital for operation. Mr. Wallis, who had been required to explain, justified his orders by saying that diphtheritic patients are admitted to the London hospitals, and the President of the Royal College of Surgeons, he said, whose opinion he had taken, thoroughly approved of the propriety of his action. The patients, he pointed out, were taken to a separate room; his medical colleagues also approved of his action, and he should have no hesitation in sanctioning the admission of future cases where tracheotomy was necessary. No action was taken in the matter. It may be mentioned that an infectious hospital is being provided.

VITALITY.

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V.[1]—VITAL CHANGES IN NERVE TEXTURES.

THE same general arrangement of the peripheral portion of the nervous system to which I have referred obtains in vertebrata and invertebrata, and in all the fibres pursue a similar circuitous course. A nervous system in any part of which the nerve fibres take the most direct and shortest course from central to peripheral distribution, as far as I have been able to ascertain, exists not in nature. In specimens of the naturally very thin tissues in which nerve fibres are abundantly distributed, sufficiently well prepared to be examined under magnifying powers of upwards of a thousand diameters, I have in many instances succeeded in following individual dark-bordered fibres to the points where they pass into the very fine fibres of the peripheral network; and the very fine fibres have been followed to another part of the same network, and I have been able to trace some to dark-bordered nerve fibres which proceed in an opposite direction.[2]

The circuitous and lengthy course which nerve fibres invariably seem to take in passing to their peripheral distribution renders the complete destruction of a considerable area of the sensitive surface an unusual event. If a portion of the network be injured, and even if many fibres thereof have been divided, the circuitous course taken by the fibres prevents any considerable portion of tissue being completely deprived of motion or sensation unless the injury be very extensive. The impaired action in the neighbourhood of the divided fibres is often so slight that it is scarcely perceptible. This fact has to be carefully borne in mind in diagnosing lesions or disturbance of the central or peripheral part of the nervous system.

There are several points in connexion with the anatomical arrangement of the finest peripheral and central nerve networks which are of service in assisting us to determine the nature of nerve action. In the first place, in connexion with both sets of fine fibres we invariably find small oval or stellate masses of living matter which have been instrumental in the formation of the fibres, and which are also concerned in the increase of the fibres and their repair when injured. Even in adult life, new fine nerve fibres are formed and thus many of the networks rendered more complex. In some cases when nerve fibres have been completely destroyed they may to some extent be replaced by the agency of these particles of living matter. The number of particles in a given area is always greater in situations in which nerve action is most remarkable, and in those cases in which the networks are concentrated in a small space the masses of living matter are in greatly increased proportion. There can be little doubt that a nerve current starting in any part of a peripheral network originates in one or more of these particles of living matter. Indeed, in all nerve organs, peripheral and central, and in every arrangement instrumental in receiving external impressions which are rendered evident to a living organism of any kind and at all periods of life, such particles of living matter are invariably present.

Molecular and chemical changes taking place in particles of living matter of various tissues and fluids at a certain distance from nerves may be influenced by a current as it is conducted along the nearest nerve fibres, and the current in the nerve fibre may be affected by changes in particular particles of living matter contiguous to, but not necessarily in actual contact with, the nerve fibre. In some situations, especially in the outer part of the cerebral convolutions, numberless fibres of excessive tenuity are arranged so as to be touched, and perhaps slightly pressed upon, by particles of living matter as these alter in volume from time to time, and vital movements, which occur sometimes in one part, sometimes in another, may produce very slight pressure upon one or more of the numerous very fine fibres along which nerve currents are passing and, as seems probable, may thus determine the particular nerve action which is to be induced in a distant part.

Although it has not been conclusively proved, numerous facts support the view that many, if not all, nerve actions are due to feeble electrical currents originating in the particles of living matter connected with all central and peripheral nerve organs. Electrical currents, we know, will pass along nerve fibres, while an important influence is, as is well known, produced upon muscular and other tissues situated in the vicinity, though not in actual contact or in structural connexion with the fibre by which the current is conducted.

Vital actions in the matter connected with the nerves and nerve centres determine the chemical and molecular changes which result in the production of the "nerve current," the nerve fibres (formed matter) being probably but the moist passive conducting threads.

In special organs in which powerful electrical currents are produced a highly elaborate arrangement, the structure of which is so intricate and the active component anatomical elements so minute that the precise arrangement of the fibres and their relation to the living elements is so difficult to demonstrate that there still remains much to learn. Nor has the exact mode of action of the several parts of the special elements been fully ascertained, although the situation in which the current is established and the course it takes on leaving the seat of its origin have been ascertained. In all cases *living matter* is the active anatomical constituent of every central and peripheral nerve apparatus as well as of the fine nerve fibres which enter and leave each. Since this living matter and all the fine nerve fibres connected with it contain a very large amount of water, without which these would be powerless, probably little is gained by comparing nerve organs with metallic generators and other non-living electrical apparatus. The electric organ developed in certain organisms in structural arrangement, in its action, and in its development resembles other nerve organs and as yet not one of these has been imitated by man. The principles of the formation and action of the apparatus of living things are surely absolutely different from the principles of the construction and action of any machine known to us. Neither as yet is there any good reason to suppose that man will ever succeed in constructing any mechanical, electrical, or illuminating apparatus of the composition and mode of action which is characteristic of all formed in living organisms.

In the records of some of the observations of certain experimenters the behaviour of a piece of a large nerve or of a portion of muscle removed from a frog just after death has been spoken of as "living," and by some these tissues have even been adduced as examples of "living protoplasm." Surely this view cannot be accepted, seeing how many structures are included in a "piece" of nerve or muscle, as well as the fluid which occupies the interstices between the fibres of both tissues. Bloodvessels, blood, connective and other structures, leucocytes, and substances of many kinds are also present, and further remove a piece of nerve and muscle from the category of simple tissues as well as from that of living protoplasm. The conclusions arrived at concerning the nature and action of these tissues can scarcely be accepted as evidence of the general phenomena proceeding in a single nerve and elementary muscular fibre during the life of the organism. We can hardly hope to be able to experiment upon a single elementary muscular fibre, or peripheral or central nerve fibre, and the small particles of living matter belonging to them and which have taken part in their formation. It seems to me that by examining with high powers well-prepared specimens of the delicate tissues referred to, particularly in the case of the little green tree frog, in which very fine nerve fibres, as I have before remarked, may be followed with certainty for a considerable distance, and may be actually traced to dark-bordered nerve fibres or followed to the individual ganglion cells in which they originate, we not only gain an exact knowledge of the origin, distribution, and relation of nerve fibres and networks to the textures they influence, but possibly may be enabled to form a correct inference concerning the origin, production, and mode of action of the nerve current. A careful review of the facts thus ascertained, in my opinion, justifies the view I have advanced concerning the probable nature of the nerve current, while some of the conclusions apparently opposed to my own and arrived at by other methods of investigation, if not in every respect in harmony, certainly are not incompatible with them.

(To be continued.)

[1] Nos. I., II., III., and IV. were published in THE LANCET of Feb. 22nd, April 11th, June 13th, and Aug. 29th, 1896, respectively.

[2] For this purpose the tissue must be taken from the animal very soon after death and preserved in some highly refracting medium which is miscible with water, such as syrup or glycerine.

THE CAUSATION AND CONSEQUENCES OF GALL-STONES IN THE INSANE, WITH CASES.

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(*Continued from p. 1005.*)

IT seems quite unnecessary to repeat the classical symptoms so often laid down as characteristic of this affection. Suffice it to say that in only 74 cases out of the series, or 13·07 per cent., did the presence of these concretions give rise to any symptoms during life. These 74 cases were divided by sex into 31 males, or 13·9 per cent., and 43 females, or 12·53 per cent. Eleven of these cases were attended with fatal results, or 1·94 per cent.; 3 of these were men, or 1·34 per cent., and 8 women, or 2·33 per cent. of the respective totals. Two cases of fatal ileus occurred amongst the above, in one case the duodenum and in the other the ileum being the seat of obstruction. Two cases were fatal from multiple hepatic abscesses, 2 from peritonitis due to ulceration and perforation of the gall-bladder, and 1 from rupture of this viscus the result of organic obstruction. One case only died from obstructive jaundice, 2 from abscess of the gall-bladder, and the remaining case from scirrhus of that viscus. A short account of the clinical history and post-mortem appearances of some of these cases will be found at the end of this paper.

Let us now proceed to consider whether there is any evidence to show that gall-stones are a causation of insanity. The influence of mental anxiety and worry, as stated by Goodhart, has already been referred to, and Budd[1] mentions hypochondriasis and melancholia as being of notable occurrence in conjunction with these concretions, whilst Murchison[2] also states they may be a centre of irritation associated with grave mental depression. But depression is not by any means the most prominent characteristic of our cases during the latter years of life, when the calculi are forming, and the majority of them have been hopeless dements. In one case only has a definite history of calculi prior to admission been found, and an operation was necessary for their removal; subsequently the patient became melancholic and was removed to the Wakefield Asylum. In two cases their presence may have accounted for the visceral delusions which existed for many years, only becoming extinct with the development of complete dementia. Out of the whole number of cases one died from suicidal burns, inflicted during an attack of melancholia, at whose necropsy the only pathological appearance described was a gall-bladder packed with numerous calculi. There were hardly any naked-eye changes noted in the brain of this patient, and it certainly seems possible that the biliary concretions may have been connected with the onset of the mental alienation. Thudichum[3] mentions a precisely similar case. On the whole, therefore, it would appear that from the present cases there is no evidence to show that gall-stones have any influence in the causation of insanity.

Next let us examine the associated conditions of the various body organs in these 566 cases, starting with the biliary passages. We find that in 60 cases the cystic duct was occluded by a calculus, or 10·6 per cent. Twenty-six of these were males and 34 females. In 25 of these cases in which the cystic duct was occluded the contents of the gall-bladder was described as a glairy mucous fluid (10 males and 15 females), and in 13 cases in which no organic obstruction was revealed at the post-mortem examination similar contents were recorded, so that it seems possible a calculus may in some instances have been dislodged during the removal of the organ from the body. Therefore, in 38 cases out of 73 we find this altered condition of the bladder contents present, equivalent to 52·05 per cent. In 12 cases out of the total number the gall-bladder contained pus, and of these 6 occurred in either sex, whilst in 8 cases its walls were ulcerated (3 men and 5 women). In 40 cases, or 7·06 per cent., the walls were much hypertrophied, and these were divided into 13 males and 27 females. Ten patients (2 males and 8 females) showed much atrophy of the gall-bladder, and in 2 fatal cases (both females) hardly any trace of it remained. It was found to be cartilaginous and partially ossified in one instance and ruptured from over-distension in another. Biliary fistulæ were established between the gall-bladder and the abdominal parietes in 2 cases, in both of which, however, death was due to other causes than the hepatic derangement, being certified as cerebral hæmorrhage and pneumonia with tuberculous peritonitis respectively. In 82 cases the gall-bladder was much distended, equivalent to 14·48 per cent., and of these 36 were males and 46 females. In 31 cases it was contracted and atrophied, and these were 11 males and 20 females, or 5·47 per cent., and in 1 case it was the seat of primary carcinoma.

The common bile-duct was occluded only in 12 instances (3 men and 9 women), or 2·12 per cent., and in 1 of these there was also primary carcinoma of its walls. The hepatic duct was obstructed in 9 cases (1 male and 8 females), or 1·59 per cent. Respecting these figures Thudichum[4] says that 5 per cent. of all cases of gall-stones have calculi in the bile ducts, but that occasionally the whole of the hepatic ducts are filled with concretions so that the liver cannot be cut with the knife, but only one case such as the latter was found in the present series.

Considering the pathological conditions of the liver we find that in 261 cases it showed the fatty change equivalent to 46·11 per cent. of the total; of these, 92 were male patients, or 41·25 per cent., and 169 females, or 49·27 per cent. of the female cases. The organ was cirrhosed in 49 cases, or 8·65 per cent., of which cases 10 occurred in males, or 4·48 per cent., and 39 in females, or 11·34 per cent. The liver was normal in 201 cases, or 35·51 per cent., and of these 95 were males, or 42·6 per cent., and 106 females, or 30·9 per cent. There were 20 cases of perihepatitis, of which 4 only occurred in males, the remaining 16 being females. In only 4 cases did the organ show the amyloid change—2 of either sex. Biliary cysts were found in 5 cases (4 females and 1 male), and in 1 of the female cases a cyst had ruptured and produced fatal peritonitis. In the male case suppuration had commenced in the cyst, but the cause of death was chronic nephritis. The organ was the seat of primary carcinoma in 3 cases and secondary cancer in four other instances, details of which cases will be found in Table IV. Concerning other pathological conditions of the liver, hydatids were found in two women, miliary tubercle in a similar number of female cases, and syphilitic gummata in one person of either sex. Multiple hepatic abscesses were present on six occasions (4 men and 2 women), and in one case in either sex this condition was the cause of death. Short accounts of these cases will be found at the end of this paper.

Perhaps the kidneys are the next most interesting organs to consider in this connexion, and the first thing noticeable is the extremely small number of cases in which they were normal, the total being only 130, or 22·96 per cent., of which 56 were males and 74 females. Beadles[5] found the kidneys granular in 16 cases out of 18 in which gall-stones existed, equivalent to 88·8 per cent., but these high figures are not sustained by the present series, as the condition was only found in 252 cases, or 44·52 per cent. of the total, the divisions according to sex being males 82, or 36·77 per cent., and females 170, or 49·56 per cent. of the totals in either sex respectively. Even supposing that the cases of marked cystic nephritis were added to the above nothing like Beadles' figures would be approached, as there were but 95 cases in which this change was recorded, equal to 16·77 per cent. and distributed between the sexes as males 38 cases, or 17·84 per cent., and females 57, or 16·61 per cent. Reckoning these two classes together we find that 347 cases are obtained, or 61·3 per cent., and comparing the total female cases with those above referred to it is seen that in this instance the number is 227, or 66·16 per cent. Fatty degeneration of the kidney was present in 58 cases, or 10·24 per cent., of which 26 were male, or 11·66 per cent., and 32 female, or 9·32 per cent. Amyloid degeneration was only found to exist in one case, a female, whilst there were 10 cases of suppurative nephritis, of which 6 occurred in males. Hydronephrosis was present in 3 women and hæmorrhagic infarction in 2; carcinoma in one person of either sex, as was pyelitis; whilst suppurative pyelitis was described as being present in one male.

[1] Diseases of the Liver, 1857, p. 378.
[2] Op. cit., p. 543.
[3] Loc. cit., p. 118.
[4] Loc. cit., p. 177.
[5] *Journal of Mental Science*, 1892, p. 385.

TABLE I.—SHOWING THE NUMBER OF CASES IN WHICH GALL-STONES WERE FOUND, WITH THE TOTAL NUMBER OF POST-MORTEM EXAMINATIONS IN EACH YEAR AND THE PERCENTAGES.

Year.	Number of cases of gall-stones in each year.			Number of post-mortem examinations in each year.			Percentages in each year.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
1867-8	5	6	11	102	67	169	5·0	9·0	6·0
1869	4	8	12	72	50	122	5·0	16·0	10·0
1870	3	7	10	100	68	168	3·0	10·0	6·0
1871	4	15	19	89	69	158	4·5	21·0	12·0
1872	4	4	8	88	77	165	4·5	5·0	5·0
1873	5	5	10	71	56	127	7·0	9·0	8·0
1874	2	2	4	106	58	164	2·0	3·5	2·0
1875	5	4	9	92	56	148	5·5	7·0	6·0
1876	3	11	14	94	68	162	3·0	16·0	9·0
1877	1	5	6	73	63	136	1·5	8·0	4·0
1878	6	7	13	89	61	150	7·0	11·0	9·0
1879	7	12	19	87	51	138	8·0	23·0	14·0
1880	13	12	25	75	72	147	17·0	18·0	17·0
1881	20	25	45	76	54	130	26·0	46·0	35·0
1882	13	25	38	103	61	164	13·0	41·0	24·0
1883	13	7	20	73	57	130	18·0	12·0	15·0
1884	11	11	22	60	66	126	18·0	17·0	18·0
1885	11	18	29	84	64	148	13·0	28·0	20·0
1886	11	15	26	84	70	154	13·0	21·0	17·0
1887	10	25	35	111	78	189	9·0	32·0	19·0
1888	9	14	23	95	45	140	10·0	31·0	16·0
1889	4	12	16	71	54	125	6·0	22·0	13·0
1890	11	18	29	83	51	134	13·0	36·0	21·0
1891	2	10	12	65	58	123	3·0	17·0	10·0
1892	8	12	20	76	52	128	10·0	23·0	16·0
1893	9	14	23	78	52	130	11·0	27·0	18·0
1894	14	13	27	78	46	124	18·0	28·0	22·0
1895	11	18	29	85	60	145	13·0	30·0	20·0
1896	4	8	12	30	17	47	13·0	47·0	26·0
Totals ...	223	343	556	2414	1702	4116	9·0	20·0	14·0

TABLE II.—SHOWING IN DECENNIAL PERIODS THE AGES AT DEATH AND PERCENTAGES OF 566 CASES SUFFERING FROM GALL-STONES.

Age.	Males.		Females.		Totals.	
	Deaths.	Percentages.	Deaths.	Percentages.	Deaths.	Percentages.
11 to 20	1	0·44	1	0·29	2	0·35
21 to 30	12	5·38	18	5·24	30	5·3
31 to 40	33	14·79	44	12·79	77	13·6
41 to 50	42	18·83	70	20·4	112	19·78
51 to 60	48	21·52	80	22·32	128	22·61
61 to 70	61	27·35	77	22·44	138	24·38
71 to 80	24	10·76	42	12·24	66	11·66
81 to 90	—	—	10	2·91	10	1·76
Unknown ...	2	0·94	1	0·29	3	0·53
Totals	223	9·23	343	20·15	566	13·75

TABLE III.—SHOWING THE MENTAL CONDITION AT DEATH OF 566 CASES SUFFERING FROM GALL-STONES.

—	Organic dementia.	Consecutive dementia.	General paralysis with dementia.	Senile dementia.	Epileptic dementia.	Chronic melancholia.	Chronic mania.	Imbecility.	Acute melancholia.	Acute mania.	Recurrent mania.	Delusional insanity.	Epileptic imbecility.	Epileptic idiocy.	Epileptic mania.	Primary dementia.	Idiocy.	Recurrent melancholia.	Senile mania.	General paralysis with mania.	Totals.
Males... ...	43	30	49	26	20	14	12	5	3	2	2	5	5	1	2	1	2	—	—	1	223
Females ...	56	62	37	49	35	26	23	12	12	8	8	5	2	2	1	2	1	1	1	—	343
Totals ...	99	92	86	75	55	40	35	17	15	10	10	10	7	3	3	3	3	1	1	1	566

TABLE IV.—SHOWING DETAILS CONCERNING TWENTY CASES OF BILIARY CALCULI ASSOCIATED WITH CANCER.

No. of case.	Sex.	Age at death.	Mental state at death.	Pathological variety of new growth.	Seat of primary affection.	Site of secondary deposits.	Description of co-existing gall-stones.	Condition of gall-bladder.	State of bile ducts as regards patency.	Further remarks.
1.	F.	71	Senile dementia.	Scirrhus.	Common bile duct.	Liver.	10, one occluding common bile duct.	Ruptured.	Common bile duct occluded.	—
2.	F.	61	Recurrent mania.	Scirrhus.	Head of pancreas.	Gall-bladder.	3 small gall-stones.	Scirrhous.	Common bile duct obliterated.	—
3.	M.	61	Delusional insanity.	Encephaloid.	Liver.	—	1 large gall-stone nearly filling gall bladder.	—	—	—
4.	M.	63.	Chronic melancholia.	Scirrhus.	Gall-bladder.	Liver.	1 ovoid at fundus, 1 at neck, impacted.	Scirrhous.	Cystic duct occluded.	—
5.	F.	82.	Senile dementia.	Encephaloid.	Liver.	—	1 large oval gall-stone, size of pigeon's egg.	—	—	Died from chronic brain atrophy.
6.	F.	71.	Senile dementia.	Encephaloid.	Uterus.	—	Numerous small black gall-stones.	Distended with calculi and fluid bile.	—	—
7.	F.	45.	Imbecile.	Encephaloid.	Liver.	Kidneys and lungs.	4 dark gall-stones, size of marbles.	—	—	—
8.	F.	44.	Delusional insanity.	Epithelioma.	Uterus.	Urinary bladder.	6 small, rough, fragile, gall-stones.	—	—	—
9.	M.	55.	Chronic mania.	Scirrhus.	Head of pancreas.	—	5 small gall-stones.	Distended with bile.	Common bile duct obliterated.	Multiple hepatic abscess.
10.	F.	53.	Chronic mania.	Encephaloid.	Right ovary.	—	Many large gall-stones.	—	—	—
11.	F.	57.	Chronic melancholia.	Scirrhus.	Pylorus.	Liver.	Several minute gall-stones.	—	—	—
12.	F.	52.	Chronic melancholia.	Epithelioma.	Uterus.	—	2 large gall-stones.	—	—	Single large abscess in right lobe.
13.	F.	56.	Chronic mania.	Scirrhus.	Left breast.	Liver.	2 large gall-stones.	—	—	—
14.	F.	79.	Senile dementia.	Scirrhus.	Right breast.	—	1 gall-stone 1 in. in its longest diameter.	Contracted.	—	Died from osteomalacia, chronic bronchitis, &c.
15.	M.	73.	Senile dementia.	Encephaloid.	Prostate.	—	4 small irregular gall-stones.	—	—	—
16.	M.	74.	Senile dementia.	Epithelioma.	Cervical glands.	—	Numerous small black gall-stones.	Distended with gall-stones.	—	—
17.	M.	43.	Dementia of general paralysis.	Scirrhus.	Head of pancreas.	Pylorus.	50 faceted stones, many ½ in. in diameter.	Distended with bile and calculi.	—	—
18.	M.	57.	Recurrent mania.	Encephaloid.	Root of lung.	Pericardium.	20 irregularly shaped and sized.	—	—	—
19.	F.	60.	Consecutive dementia.	Epithelioma.	Uterus.	—	1 large gall-stone.	Distended with pus.	Cystic duct occluded.	—
20.	M.	59.	Consecutive dementia.	Encephaloid.	Right adrenal.	Lungs and kidneys.	2 large irregular spheres, ¾ in. in diameter.	Distended with inspissated bile.	Cystic duct occluded.	—

With regard to the circulatory system the heart and vessels were normal in only 111 cases of the present number, or 19·43 per cent., of which 43 were men, or 19·28 per cent., and 68 women, or 19·82 per cent. Beadles found some degree of atheroma present in 88·8 per cent. of his cases and mentions the same number for cardiac hypertrophy and dilatation. Atheroma was present in this series of cases in 363 occasions, or 64·13 per cent., of which 147 instances were in men, or 65·91 per cent., and 216 in women, or 62·97 per cent., whilst some degree of hypertrophy and dilatation existed in 153 cases, or 27·03 per cent., 57 males, or 25·56 per cent., and 96 females, or 27·98 per cent. Valvular lesions existed in 266 cases, or 46·99 per cent., divided into males 100, or 44·84 per cent., and females 166, or 48·39 per cent., whilst some degree of fatty degeneration of the myocardium was found in 154 instances, or 27·2 per cent., of which 65 were men, or 29·14 per cent., and 89 women, or 25·94 per cent.

Pneumonia was found to be the most common cause of death in Beadles' cases and accounted for 11 out of 18, or 61·1 per cent., but in the present series only was certified in 71 cases, or 12·54 per cent., though some degree of pneumonic consolidation occurred in 120 cases, or 21·2 per cent. of the total—namely, in 36 males, or 16·14 per cent., and 84 females, or 24·49 per cent. of the total female cases.

Phthisis and gall-stones are mentioned as being frequently associated by George Harley[6] and many other authorities. It figures as the cause of death in 3 of Beadles' cases out of 18, equivalent to 16·6 per cent. As a cause of death in the present cases it is recorded in 82 instances, or 14·48 per cent., whilst some degree of tuberculosis was present in 100 examples, or 17·66 per cent., the men being 44 in number, or 19·73 per cent., and the women 56, or 16·32 per cent.

Lastly, considering the brain, it causes little surprise, after glancing at Table III., to find that in only 188 cases was there not marked cortical atrophy with excess of cerebro-spinal fluid present, and that in a large number of the 188 patients some hæmorrhage, focus of softening or new growth, was found. Thus we have 378 cases of cortical atrophy, or 66·78 per cent., of which 166 were in males, or 74·43 per cent., and 212 in females, or 61·8 per cent. Beadles states that in the whole of his 50 cases there was some morbid condition of the brain, but Edwin Goodall[7]

[6] Loc. cit., p. 587.
[7] *Journal of Mental Science*, 1892, p. 454.

considers that this fact is of but little importance, as the great majority of the subjects were chronically insane. This view is entirely in accordance with my opinion, and it seems improbable that we shall be able to determine the etiology of biliary calculi more definitely until such time as the precise connexion of cholesterin with the nervous tissue be ascertained. In conclusion, it seems advantageous to describe shortly a few of the most interesting cases, especially those attended with fatal termination as the direct result of gall-stones.

CASE 277. *Gall-stones giving rise to hepatic colic and eventually to suppuration of the gall-bladder and formation of biliary fistula.*—The patient was a married man aged fifty years, whose mental condition was that of organic dementia. He was admitted to the asylum on Dec. 17th, 1883. On Jan. 10th, 1884, he had an attack of hepatic colic unattended by jaundice, and lasting nearly a week. There were no unusual symptoms. On May 26th, 1884, he had slight diarrhœa with some tympanites. The tongue was moist and furred. The liver dulness was somewhat increased, and percussion over the region of the gall-bladder and most of the abdomen caused pain. From this date till June 3rd he suffered from irregular pyrexia without obvious cause, and his tongue was usually much furred, the motions being normal. There was no distension of the abdomen or anorexia. The pyrexia and emaciation continued up to June 16th, and were accompanied by much pain in the abdomen. On the latter date he had a severe rigor, and an abscess which had been pointing for three days in the right hypochondrium was aspirated, and about twelve ounces of very fœtid pus were removed. This was followed by relief of pain, fall of temperature, and profuse perspiration. A drainage tube was introduced, and a biliary fistula formed, which continued to discharge during the next two months. The patient died on Aug. 23rd from cerebral hæmorrhage. At the post-mortem examination there was a fistulous opening in the skin of the right hypochondriac region, just below the lower margin of the ribs and almost in the nipple line, which communicated directly with the gall-bladder. The latter was converted into a large, ragged, irregular cavity, bounded below by the right corner of the great omentum and the hepatic flexure of the colon with its mesocolon, and above by the under surface of the right lobe of the liver, which presented an irregular broken-down aspect, the most superficial surface being converted into a pultaceous mass of greenish-grey débris mingled with small faceted biliary calculi. The disintegration process had extended far beyond the limits of the gall-bladder, especially towards the right, where the thickness of diseased tissue involved the liver substance to a depth of about two inches, and on section was seen to consist of dense fibrous tissue having somewhat the appearance of scirrhus to the naked eye. The boundary between the inflammatory growth and the liver tissue was ill-defined; the remainder of the organ was very pale and fatty and did not re-act with iodine; there was no increase in its size.[8]

CASE 156. *Gall-stones causing carcinoma of the gall-bladder and liver: death.*—The patient was a single man aged sixty-three years, whose mental state on admission was one of acute melancholia, and at death of chronic melancholia. He was admitted to asylum on Jan. 28th, 1867. He remained in a quietly depressed state for thirteen years, and in 1880 was noticed to have lost a great deal of flesh. Subsequently he became very feeble and developed bed-sores over both great trochanters, although of cleanly habits. He suffered from slight cough with expectoration of mucus tinged with blood, but examination of the thorax and abdomen yielded negative results. He died on July 22nd, 1890, and at the necropsy the liver was found to weigh 1912 grammes. On the upper surface of the right lobe was a pale circular patch of secondary cancer about three-quarters of an inch in diameter, the surface of which was smooth but slightly raised, and throughout the hepatic substance there were numerous nodules of a similar growth. The gall-bladder was adherent to the transverse colon, of hard, firm consistence and irregular outline. Upon opening it an ovoid calculus was found at the fundus measuring one inch by three-quarters, and at the neck was an attached mass of a dry yellowish-brown colour and gristly consistence, about two inches by one inch in size and containing bands of whitish tissue, which were evidently scirrhous. In addition there was, in this region, a smaller calculus, and a quantity of pultaceous débris. The walls of the gall-bladder were thickened to the extent of three quarters of an inch by scirrhous growth. There was no secondary deposit in any other organ than the liver.

CASE 9. *Gall-stones causing inflammation of gall-bladder and surrounding tissues with suppuration.*—The patient was a single man aged thirty years, whose mental condition was one of dementia with general paralysis. He was admitted to asylum on May 21st, 1868, and at this date there was nothing unusual about his case. On July 20th he developed some diarrhœa with pyrexia, rapid pulse, and dry brown tongue. The abdomen was tender and there was some tympanitis. These symptoms persisted until Aug 2nd when he died from general paralysis and chronic nephritis. At the post-mortem examination the liver weighed 1467 grammes and was firm and fairly healthy-looking except in the immediate neighbourhood of the gall-bladder, to which it was firmly adherent as well as to the transverse colon. Upon separating the adhesions a quantity of pus and bile with gall-stones were exposed to view. The gall-bladder itself could not be distinguished from the surrounding structures. There was no communication between the sac of the abscess and the large intestine.

CASE 35. *Gall-stones causing occlusion of cystic duct and ulceration with subsequent suppuration of gall-bladder; death from perforation and peritonitis.*—The patient was a single woman aged thirty-five years whose mental state was that of epileptic dementia. Her bodily condition was feeble and reduced. She was admitted to asylum on Sept. 14th, 1854. Nothing to note occurred in her case until Jan. 25th, 1871, when she was said to have been not looking so well for some days and had been giving vent to moaning cries, but was quite unable to indicate the seat of her suffering. Her pulse was 100 and her temperature normal. The abdomen was slightly distended. An enema was given, but with little result. She appeared somewhat better towards evening and took nourishment freely, but became suddenly collapsed and died at 10 P.M. At the necropsy the liver weighed 1488 grammes, and upon removal there was seen to be a small abscess near the fundus of the gall-bladder which was surrounded by yellow lymph and involved the head of the pancreas and contiguous portion of the duodenum. The whole of the outer surface of the gall-bladder presented a yellow appearance, and on section the walls were found to be enormously thickened and contained numerous small abscesses. The mucous lining of the gall-bladder was congested, ulcerated, and in places sloughing, and the contents of the viscus was a mixture of pus and bile. A large calculus blocked up the lower portion of the gall-bladder and the orifice of the cystic duct. The liver was adherent to the diaphragm along the whole of its upper surface by old fibrous bands, its capsule was thickened, and the substance showed "nutmeg" change.[9]

CASE 62. *Gall-stones causing occlusion and complicated by carcinoma of the common bile duct; ulceration of the walls of the gall-bladder and subsequent rupture with fatal peritonitis.*—The patient was a married woman aged seventy-one years whose mental state was that of senile dementia. She was admitted to asylum on Nov. 7th, 1865, and went on quietly and without change until Feb. 10th, 1873, when she became jaundiced, the stools were pale, the urine highly coloured and containing bile, and the pulse very feeble. She remained in much the same state during the next three days, when it was noticed that she had become much more feeble. She eventually died on Feb. 18th without any change in her symptoms. At the post-mortem examination all the viscera in the abdominal cavity were found to be stained a deep yellow colour, and there was a large amount of turbid yellow fluid in the peritoneum, with a few bands of soft lymph adherent to the intestines. There was no trace of peritoneal thickening or injection. The liver weighed 1590 grammes, was considerably enlarged, and displaced upwards. On raising the liver the gall-bladder was seen to be ruptured, its inferior surface being entirely torn up. Its walls were thinned and the mucous membrane was ulcerated. It still contained ten gall-stones, one of which was impacted near the origin of the common bile duct. Upon tracing the bile duct downwards it was found to be much thickened, whilst around its duodenal orifice there was a mass of scirrhus, very hard, creaking on section, and exhibiting a white and glistening cut surface. The duct passing through the mass was a good deal constricted, but not quite occluded. The liver substance was exceedingly soft and fatty.

CASE 136. *Gall-stones causing hepatic colic and complicated by thrombosis of the portal vein; death from rupture of the latter.*—The patient was a married woman aged sixty-two years, whose mental condition on admission was that of acute, and at death chronic, melancholia. She was admitted to asylum on Nov. 24th, 1874. The depression varied in intensity until the end of 1879. On Jan. 1st, 1880, she was seized with intense pain in the right hypochondrium and epigastrium; she described it as lancinating and as feeling like a cord drawn very tightly around her body. There was vomiting, and an aperient injection was given per rectum and morphia subcutaneously. She was comfortable during the day, but a paroxysmal attack recurred at night and was treated by morphia. The patient slept well, but at 7 A.M. on Jan. 2nd she was seized with a syncopal attack and was collapsed, pulseless, and cold when seen by the medical officer. The heart's action could not be revived and she sank a few moments later. At the necropsy the liver weighed 1060 grammes and was normal in structure. There was thrombosis of the portal vein near its entrance into the liver, and the vessel was ruptured at this site. One calculus the size of a pea was found in the gall-bladder; none could be discovered in the biliary passages or small intestine.

CASE 89. *Gall-stones causing icterus and hepatic colic; complete obstruction of the common bile-duct; formation of biliary cysts and rupture of one of these leading to fatal peritonitis.*—The patient was a married woman aged fifty-three years, whose mental state was that of chronic mania. She was admitted to asylum on Feb. 11th, 1873, and remained unchanged for three years. On April 24th, 1876, she was seized with great pain in the right hypochondrium, nausea, vomiting, and purging. She was much collapsed, with a small pulse and cold, clammy skin. The pain and tenderness in the epigastrium and the right hypochondrium continued during the next twenty-four hours, together with uncontrollable vomiting and a sallow, cachectic appearance. The tongue was clean and moist and the pulse fairly strong. The symptoms were relieved by treatment on April 26th, but became worse again on April 27th, the pain shooting down to the hypogastrium and being associated with great tenderness on pressure. There was jaundice; the urine was highly coloured and the stools very pale. No enlargement of the liver was apparent, and no tumour could be felt at the site of pain. The evening temperature was 103° F. and the pulse 140. On the 28th the patient was better. The morning temperature was 99° and the pulse 90, fairly strong. She was easier upon deep pressure in the epigastrium, but shrank from superficial palpation; there was tenderness in the region of the pancreas. She became worse towards evening, and complained much of pain in the epigastrium shooting round towards the back. There was less pain in the hypogastrium, and the tenderness was greatest in the right hypochondrium. The evening temperature was 101·5°, the pulse 120, and the respirations 18. On the 29th the pain ceased suddenly, the jaundice was more marked, and there was still some tenderness in the right hypochondrium. On May 1st the pain returned with great tenderness on deep pressure and there was more pronounced jaundice. The evening temperature was 102·6°, the pulse 110, and the respirations 32. On the 2nd the jaundice was still more marked. She complained of pain all over the abdomen and was very sensitive to touch. The epigastrium was most acutely tender, and there was some tympanitis. The evening temperature was 102·3°, the pulse 120, and the respirations 36. She developed pulmonary œdema during the next twenty-four hours. On the 4th peritonitis supervened, and she laid in bed with her knees drawn up in the dorsal decubitus. The evening temperature was 103·8°, the pulse 130 and very feeble, and the respirations 30. On the 6th the patient was much prostrated. Pain was not present unless she was moved. The liver dulness was greatly increased and measured seven inches vertically. There was still great tenderness upon deep pressure of the abdomen. Jaundice was intense. The bowels were moved normally (clay-coloured stools). The evening temperature was 101·7°, the pulse 120, and the respirations 32. The symptoms continued until May 9th, when she died. The pain became much more intense during the last three days and was accompanied by irregular pyrexia as before. At the post-mortem examination upon

[8] Murchison, pp. 556-9 for ninety-three similar cases; also Case No. 368.

Murchison, pp. 546-7; see also Case No. 9.

opening the abdomen the knife entered a cavity containing eight ounces of reddish-yellow, semi-purulent fluid, containing some bile, which was situated near the lower border of the liver. It was connected with the liver and shut off from the general peritoneal cavity by recent lymph. The liver in this region was covered with lymph, which on being scraped away revealed a small orifice from which bile flowed. The viscera in this region were all bile-stained and matted together with recent lymph. The walls of the gall-bladder were much thickened, the viscus shrunken, and the bile duct near its outlet into the duodenum was firmly plugged by a rough, mulberry-like calculus. The liver weighed 1948 grammes, was soft in consistence, greenish in colour, and contained several other cysts, some of them as large as filberts, and filled with greenish bile. The lower portion of the right lobe was greatly broken up and disorganised by extravasation of bile. It was evident that from rupture of the biliary cyst mentioned above into the abdominal cavity peritonitis had been due.

CASE 130. *Gall-stones causing obstructive jaundice; ulceration and suppuration of walls of the gall-bladder; death from abscess of the liver.*—The patient was a single woman aged sixty-four years, whose mental state was that of dementia consecutive to delusional insanity. She was admitted to asylum on Nov. 13th, 1860, and during the next nineteen years dementia slowly progressed, though she was subject to outbreaks of noisy excitement. Usually she was employed in the laundry. On Oct. 12th, 1879, she had a severe attack of jaundice. She did not complain of pain, though there was much tenderness in the region of the gall-bladder with considerable tympanitis, but there was no appearance of tumour or obstruction and she was much troubled by slight but almost incessant vomiting. The pulse was feeble, but the temperature never rose above 99° F. She died three days later. At the post-mortem examination the liver weighed 1506 grammes and its substance was pale, soft, and fatty. There was a large, irregular abscess cavity in the right lobe containing pus and brownish disintegrated liver substance; it was somewhat larger than a pigeon's egg, and the liver was congested in its neighbourhood. The gall-bladder contained pus and several gall-stones; its walls were ulcerated and much thickened.

CASE 368. *Gall-stones requiring operation for their removal on account of grave attacks of hepatic colic: recovery from operation: establishment of permanent biliary fistula: supervention of melancholia.*—The patient was a married woman aged fifty-five years, whose mental condition was that of chronic melancholia. She was admitted to asylum on Aug. 16th, 1884. She had been an in-patient of a hospital for five months prior to admission, and six weeks before the above date had several gall-stones removed by operation. Three weeks later she became depressed and sleepless, with refusal of food and suicidal tendencies. A biliary fistula became established, which continued to discharge externally until June 14th, 1887, when she died from catarrhal pneumonia and tubercular peritonitis. At the necropsy the skin over the abdomen was very green. There were a linear scar and a small fistula in the region of the gall-bladder placed vertically and about two inches in length. The remains of the gall-bladder were attached to the inner surface of this scar, and the finger passed into the cystic duct impinged upon a moderate-sized calculus blocking the orifice. The liver weighed 1620 grammes and was firmly adherent to all the surrounding structures. In the peritoneum covering the upper surface of the right lobe was a mass of caseous tubercle about one-third of an inch in diameter, and a similar mass was situated in the capsule of the right border. The organ was very pale and markedly fatty.

CASE 312. *Gall-stones complicated by double inguinal hernia and leading to ulceration and perforation of the gall-bladder, with death from peritonitis.*—The patient was a single man aged fifty-four years, whose mental state was that of delusional insanity. He had double inguinal rupture. He was admitted on April 20th, 1882, and remained quietly depressed and deluded until three years later. On Oct. 1st, 1885, he complained of pain in the epigastrium, which was decidedly tender on palpation. There was some anorexia, but the tongue was clean and the bowels were regular. He complained much of thirst, and his urine contained a little albumin. There was some cardiac hypertrophy and vascular degeneration. The contents of the right hernial sac could not be completely reduced owing to adhesions having formed just within the internal abdominal ring, and there was slight tenderness on pressure at the site as contrasted with the opposite side. There was no vomiting. The morning temperature was 99·5° F. and the evening 100°. The pulse and respirations were 88 and 20 in the morning, and 82 and 20 respectively in the evening. He had recovered by Oct. 4th and was ordered to remain in bed until fitted with a new truss. On the evening of Oct. 23rd he suddenly became collapsed and complained of severe pain in the abdomen; the left hernia was very tense and was only reduced after a considerable amount of taxis had been employed. The percussion note in the left flank was dull and there was undue fulness in this region, probably due to fæcal impaction in the colon. Two large enemata were given, but no fæces were brought away. The patient rallied somewhat later on. On Oct. 24th his condition was most critical; the abdomen was swollen, tense, and painful to the touch, there was dulness in the left flank as before, the face was livid, respiration was laboured, the pulse quick and extremely compressible and feeble, and the body surface cold. Digital examination of the rectum failed to reveal anything abnormal. The enemata were repeated and an attempt was made to break down the supposed scybalous mass in the colon with a long tube. This was unsuccessful and he died rather suddenly somewhat later in the day. At the necropsy the intestines were bathed in a yellow-chrome fluid in which small pieces of recent lymph were floating. Twelve ounces of this fluid was removed. The great omentum was adherent to the hernial sac on the right side and easily withdrawn from the left hernial cavity. The portion of omentum contained in the left hernial sac showed no recent or remote signs of inflammation, nor was it markedly congested. There was no sign of strangulation of either the large or small gut. The peritoneum in the left lumbar region was much injected, elsewhere the parietal serous membrane was normal. About five inches of the middle of the jejunum was injected externally and the intestines elsewhere in places were covered with recent membranous lymph. The liver weighed 1280 grammes and was fatty. The gall-bladder was thickened and contained a number of small calculi which were soft and friable in character. On the inner surface of the lower wall of the gall-bladder was an ulcer which had perforated the coats of the viscus.

CASE 390. *Gall-stones leading to ulceration of the walls of the gall-bladder and suppuration: formation of multiple hepatic abscesses.*—The patient was a married man aged fifty-one years, whose mental state was that of dementia with general paralysis. He was admitted to asylum on Feb. 12th, 1887, and ran the ordinary course of general paralysis, dying nine months later without any signs of hepatic mischief. At the necropsy the liver weighed 2470 grammes, and scattered throughout the right lobe were numerous large abscess cavities, some being two inches in diameter. The liver tissue between the cavities was very dark in colour and evidently breaking down. The left lobe was pale, soft, and fatty. The gall-bladder contained a little purulent fluid and a large calculus the size of a pigeon's egg. Its walls were greatly thickened and the mucous membrane rough and eroded in places. Its cavity appeared to be contracted.

CASE 474. *Gall-stones as a possible factor in the causation of insanity and leading to hepatic colic, complicated by strangulated femoral hernia: operation for latter and recovery; ulceration of the walls of the gall-bladder and formation of fistula with duodenum; death from ileus due to gall-stones.*—The patient was a single woman aged seventy years, whose mental condition was that of dementia consecutive to delusional insanity. She had a left femoral hernia. She was admitted to asylum on March 1st, 1871. She had delusions about property and of a sexual nature. On admission to asylum she stated that she had borne children to several members of the Royal Family, and was the mother of seven nations; these were the Chinese, English, Scotch, Irish, French, Danes, and Turkish. She was the "Shede," which meant "the life-mother," of certain nations in Africa. She thought that this asylum belonged to her, for if a Turkish shede remained half an hour in any place it became her property. In May, 1888, she had an attack of irregular pyrexia and vomiting, lasting about a week, and which she attributed to giving birth to fourteen boys and a girl. A similar attack occurred in December, 1890, lasting only three days and characterised by collapse and feeble pulse, with pain in the abdomen, which she was unable to locate, but stated was due to thirty children she got from Royalty seventy-seven years ago. She stated that she had had 1675 children in all, that the Emperor of Russia was her husband, and that she had borne him nine children. A year later she had another attack of hepatic colic, lasting only an hour; all her extraordinary delusions remained unaltered and there was considerable superadded dementia. On Nov. 17th, 1892, she vomited watery fluid and became pale and collapsed. No pulse could be felt. There was a small left femoral hernia, which was somewhat tender, but free from impulse. Taxis failed to effect reduction, and later in the day there was vomiting of brown fluid, and the patient remained collapsed. Ether was administered, which caused the pulse to improve; the hernial sac was opened and found to contain a mass of omentum about the size of a hen's egg and a drachm or two of rather sanious fluid. The omentum could not be returned to the abdominal cavity, so was ligatured and excised. She passed a good night after the operation. The next morning she vomited some brownish fluid, but seemed no longer in pain; her face was pale and the radial pulse remained extinct. The bowels were not moved. The abdomen was tympanitic, especially over the transverse colon and stomach, and not markedly tender on pressure. The bowels were moved by turpentine enema. The tongue was rather dry, but she took nourishment fairly. On the 19th slight stercoraceous vomiting occurred; the tongue was clean but dry; the abdomen was tympanitic all over; there was tenderness in the epigastrium, where the patient said she had some pain. The operation wound was healthy. The pulse was still extinct. On the 20th she became very restless and appeared to suffer great abdominal pain; her legs were drawn up in the dorsal decubitus and her hands clasped over the abdomen. Morphia with atropine was administered subcutaneously. She appeared unrelieved, vomited half a pint of brownish fluid, became comatose, and quickly expired. At the post-mortem examination the operation wound was found to be healed by first intention and the omentum firmly adherent around the inner opening of the femoral canal, the attachment being fibrous and evidently very old. The bowel and stump of omentum presented a perfectly normal appearance. There was very strong adhesion between the first part of the duodenum and the under surface of the liver at the region of the gall-bladder, which could not be properly defined. There were some large gall-stones in this part of the bowel and lower down the gut another large calculus was found firmly impacted in the jejunum, requiring much pressure to effect its displacement. Its size was that of a large plum, but it was somewhat irregular in shape, and above the calculus the bowel was of much greater size than below. Upon incising the intestine immediately above the obstruction a large amount of fluid escaped. There was no ulceration or perforation of the bowel present in this region. The omentum was extremely adherent to the left side of the abdominal wall, practically from the last rib to the iliac crest, and required to be cut away therefrom. In the descending colon, four or five inches above its sigmoid flexure, narrowing of the lumen was found associated with a fibrous band—part of the omentum. There were no signs of inflammation at any part of the bowel wall in this region. Between the impacted gall-stone and this constriction the intestines were nearly empty; below the constricting band some fæces were present. The stomach contained light yellow fluid and its walls appeared to be normal. The liver weighed 1115 grammes and apart from the adhesion to the duodenum was normal.[10]

CASE 477. *Gall-stones as a possible causation of insanity and causing hepatic colic: ulceration and suppuration of the gall-bladder and death from obstructive jaundice.*—The patient was a widow aged seventy-eight years, whose mental condition was that of dementia consecutive to delusional insanity. She was admitted to asylum on July 3rd, 1886. She had numerous auditory hallucinations and grandiose delusions, believed that the voices told her there were foreign soldiers in Wakefield, often heard voices in the air, and could hear cannon being rolled about a long way off. She was 119 years old and had thirty-two children, the youngest of whom were twins six years of age. She could not see anything unusual in having children at such an advanced age. She suffered from facial erysipelas several times during the next ten months. On May 25th, 1887, she suffered from nausea, vomiting, pain in the epigastrium, and slight jaundice. The tongue was moist, dark brown, and furred; the stools were pale. She remained in much the same state during the next two days except that there was no further vomiting. There was irregular pyrexia. On May 29th the icterus was more intense and she remained in this state until the end of July, having suffered from irregular pyrexia all the time, after which she recovered. Similar attacks occurred between July, 1887, and

[10] Murchison, pp. 549-50; see also Case 551.

December, 1892, at varying intervals, and the last attack being unusually severe and protracted as well as being accompanied by albuminuria eventually proved fatal, uræmia supervening. At the post-mortem examination the liver weighed 1400 grammes, and was universally adherent to the diaphragm and surrounding viscera. The gall-bladder was made out with difficulty, but in its region was an irregular cavity, surrounded by much inflammatory material and containing a dozen gall-stones with some pus. The common bile duct was blocked near its orifice into the duodenum by an irregular mulberry calculus. The liver was very fatty and gave no reaction with iodine. The kidneys were fatty and cirrhotic.

CASE 524. *Gall-stones causing hepatic colic, jaundice, inflammation and ulceration of the walls of the gall-bladder, multiple hepatic abscesses and lobular pneumonia.*—The patient was a woman aged forty three years whose mental condition was that of chronic mania. She was admitted to asylum on Jan. 23rd, 1894. On Nov. 12th she had an attack of hepatic colic with emesis, epigastric pain and tenderness, jaundice, clay-coloured stools, and bile in the urine. She was very obese, and nothing beyond tenderness could be elicited by palpation of the abdomen. There was very irregular pyrexia, and the temperature on two occasions during the first forty-eight hours reached 104·6° F., subsequently dropping to 98°. Three days later she developed left lobular pneumonia. On the 24th she had done fairly well up to this date, the pneumonia appeared to be pursuing its course slowly but favourably, and the icterus was less intense, whilst the fæces and urine had almost regained their normal colour, and her strength was fairly maintained. The improvement was maintained for four days longer, but on Nov. 28th the right lung became affected with several patches of pneumonic consolidation, and she died the following morning. At the necropsy the liver weighed 1900 grammes and was congested and fatty. There were numerous small abscess cavities scattered throughout the left lobe, and the right lobe was riddled with larger abscesses. The gall-bladder contained about two drachms of bile stained purulent fluid, and there was a calculus the size of a large filbert near the orifice of the cystic duct. The common bile duct was occluded by a smaller mulberry-like stone not far from its termination. The walls of the gall-bladder were much thickened and the mucous membrane was ulcerated. There were one small patch of pneumonia in the lower lobe of the right lung the size of a walnut and considerable basic congestion. There were much more advanced patches of consolidation in both lobes of the right lung.

CASE 551. *Gall-stones causing inflammatory adhesion of the gall-bladder to the duodenum, connecting ulceration, and death from obstruction of the bowel.*—The patient was a married woman aged fifty-eight years whose mental state was that of dementia consecutive to melancholia. She was admitted to asylum on May 29th, 1869. Up to 1887 her physical condition remained good, but in April of that year she had her first attack of hepatic colic, lasting about four days. Nothing could be discovered upon palpation on account of her extreme obesity. There was never any jaundice and she speedily recovered, being subject to no further untoward symptoms till Nov. 22nd, 1895, when she was seized with very severe vomiting, diarrhœa, and slight pyrexia, accompanied by slow and very feeble pulse. There was no jaundice, and no information could be elicited as to abdominal pain on account of her extreme dementia. Two days later she remained in very much the same state, but there had been no further vomiting; the tongue was foul and covered with white fur, and the abdomen was lax and tympanitic. On Nov. 25th the abdomen was still tympanitic, there had been no further movement of the bowels, the tongue was dry and brown, there were sordes on the lips and teeth, and she was semi-comatose. There was no jaundice, but almost complete ischuria. A small amount was withdrawn by catheter and was found to be acid, of specific gravity 1013, of a dark sherry tint, slightly turbid, with a trace of albumin and of indican. There were no casts. The coma deepened and she died the same afternoon. At the necropsy the liver weighed 1110 grammes, and was congested and friable. The gall-bladder was firmly adherent to the under surface of the liver, its walls were thickened and ulcerated; there was direct communication between this viscus and the duodeum about an inch and a half beyond the pylorus by a large wide opening more than an inch in diameter. The tissues around this were much indurated and the hepatic flexure of the colon was adherent to the mass. Immediately beyond the communication with the gall-bladder a very large calculus was impacted firmly in the duodenum. The stone was of a blackish tint and had a granular surface, in shape a slightly tapering cylinder with rounded ends. Its greatest length was 2 in., and the smallest diameter 1¼ in., around the length of the cylinder was 4½ in. Its weight was 35 grammes. The stomach was enormously dilated, but the remainder of the alimentary canal was normal.

CASE 554. *Gall-stones causing occlusion of cystic duct, great dilatation of gall-bladder, with ulceration of its walls and death from multiple hepatic abscess.*—The patient was a single man aged sixty years, whose mental state was that of dementia consecutive to recurrent mania. He was admitted to asylum on Dec. 31st, 1858, and led an uneventful life for thirty-seven years, working regularly on the land. On Dec. 5th, 1895, the patient was noticed to be unwell, and upon examination was found to have an aortic regurgitant bruit with advanced vascular degeneration. There was slight pyrexia; he was unable to give any information about himself. On Dec. 12th there was some slight jaundice and the irregular pyrexia continued. The stools and urine were normal and the pulse was slow and feeble. There was no pain. On the 18th he persistently refused all medicine. Abdominal examination yielded nothing positive. The jaundice had entirely disappeared, the fæces appeared normal, and the urine contained a trace of albumin; no bile. There was no appearance of pain. He was very feeble, but took nourishment well. On the 24th the temperature was extremely irregular; the night before it was 103·6° F., and sank to 99·6° the following morning. Icterus remained absent, and the urine and fæces still appeared normal. He died two days later. At the necropsy the liver was found to be very much enlarged, and weighed 2245 grammes. It was everywhere riddled with numerous abscess cavities containing thick, yellow, very fœtid pus. The gall-bladder was of enormous size, and contained fully ten ounces of sanious purulent fluid in addition to four gall-stones, the weight of which was 20 grammes, the largest of them weighing 15 grammes. The smallest calculus was firmly impacted in the mouth of the cystic duct; the common bile duct appeared patent. The walls of the gall-bladder were thin, and the mucous membrane ulcerated and eroded in several places.

Wakefield

THE CLINICAL FEATURES OF UTERINE CANCER.

BY W. ROGER WILLIAMS, F.R.C.S. ENG.

I.—SYMPTOMATOLOGY.

IT is of great importance to be able to recognise the existence of uterine cancer in the earliest possible stage, as well as when the disease is more advanced, and this can only be done by paying attention to such indications as I will now proceed to describe. Hæmorrhage, fœtid discharge, and pain are the symptoms on which most reliance can be placed; and with these there usually goes marked disturbance of the general health. The order of succession of the different symptoms, their precise mode of association, the relative urgency and duration of each, vary so much in different patients that no general description will exactly fit every case. Cancer of the uterus is often ushered in by certain vague premonitory indications, such as malaise, lassitude, loss of appetite, uneasy sensations in the lumbo-sacral and genital regions, leucorrhœa, &c., but these generally pass unnoticed.

In most cases hæmorrhage is the first symptom to attract the patient's attention and it is rarely altogether absent. Hæmorrhage is, in fact, by far the most important revealing symptom of uterine cancer. In the midst of good or passable health, sudden—often profuse—loss of blood is experienced. This usually appears at some time other than the catamenial period, and coitus may be its determining cause. If the amount lost is small, even this indication may at first excite no alarm, for slight irregular hæmorrhages, of no special import, are not uncommon at this period of life. Usually, however, the initial hæmorrhage is considerable, amounting to a "flooding"; or if trivial at first it soon reappears in this exaggerated form. Thus alarm is excited and the patient is induced to consult a surgeon. It is impossible to insist too strongly on the importance of at once submitting patients seeking advice under such circumstances to vaginal examination. Metrorrhagia occurring for the first time after the complete cessation of the catamenia is generally due to cancer. In those who have not ceased to menstruate the disease may manifest itself by increased profuseness of the catamenial flow or by its undue prolongation, instead of by metrorrhagia. It is important to bear in mind that these hæmorrhages are quite independent of ulceration, which they precede. The blood is furnished by the congested mucosa, which relieves itself by the issue. This accounts for the temporary mitigation of the symptons so noticeable after "flooding." As the malady progresses hæmorrhages become more frequent, and in the intervals the patient is seldom free from serous or sanio-serous discharge. In the penultimate stage, however, owing to the great enfeeblement hæmorrhage is much less abundant. Although the total amount of blood thus lost in the course of the disease is very great, yet death from hæmorrhage is decidedly rare; of ninety fatal cases under my observation only two succumbed from this cause.

In the initial stage of the disease a certain amount of leucorrhœal *discharge* is of common occurrence, but there is then rarely any fœtor. With the supervention of ulceration, however, the character of the discharge changes; it acquires a dirty, reddish colour "like meat juice," as well as great acridity, and a peculiarly fœtid odour. It may be of watery or puriform consistence and it is generally fairly abundant. Small clots, fibrinous shreds, and débris from the disintegrating neoplasm are often noticeable in it. The acridity is sometimes such as to cause excoriation of the external genitalia and adjacent parts, and even pseudo-membranous forms of inflammation. In these respects it differs markedly from the comparatively unirritating glairy discharge of cervical catarrh and from the muco-purulent exudation of endometritis. Although fœtid discharge is a fairly constant symptom of uterine cancer, yet the mere presence of such a symptom by no means justifies the diagnosis of that disease. Fœtid discharges are often associated with inflammatory affections of the uterus and with other morbid conditions, especially such as involve the presence of any decomposing matter within the organ—e.g., retained clot, placental fragments, sloughing fibroid, or polypus, &c. On the other hand, the peculiar odour of the cancerous

discharge is often not developed until a late stage of the disease.

The inferior segment of the uterus in its normal state is so exceedingly callous to ordinary stimuli that it would be surprising if much pain were experienced in the early stages of the disease. Hence we generally find that the malady has made considerable progress before the patient's suffering is great, although in exceptional cases pain may supervene early. In about one-seventh of all cases no severe pain is complained of throughout the entire course of the disease. The earliest painful sensations are those due to congestion and tumefaction at the seat of the disease, hence the dull, aching, and dragging pains in the back, iliac, genital, and anal regions, and the uneasy sensations associated with micturition, defæcation, &c. In later stages the suffering is more severe, constant burning and dull aching pains being complained of, together with frequent crises of extreme exacerbation often of a lancinating neuralgic character. Paroxysms of pain recurring several times in the course of twenty-four hours are specially indicative of cancer of the corpus. The worst pains are generally due to invasion of adjacent structures by the spread of the disease and the complications resulting therefrom; when the nerves are thus implicated the pain is often very severe and intractable. Inflammatory complications add much to the patient's suffering, especially pelvic peritonitis. In conclusion, it may be remarked that of all the symptoms of uterine cancer pain is the most variable and the least reliable. Indications of deterioration of the general health manifest themselves sooner or later in most cases, and the various disturbances appear that together constitute the clinical *ensemble* known as the cancerous cachexia, into the details of which I need not here enter. It is only during the last six or eight months of their illness that most patients are bedridden, the total duration of the disease, according to my calculation, averaging twenty-four months.

II.—PHYSICAL EXAMINATION.

More reliable information can be gained by digital examination per vaginam than by any other mode of physical examination. The speculum need only be resorted to exceptionally to complete what has thus been learnt, as its introduction is apt to cause pain and hæmorrhage. It is desirable to proceed methodically. Attention should first be directed to the portio vaginalis, especially in the vicinity of the os. In early stages of the disease a certain amount of tumefaction or ill-defined hardness may be the only noticeable abnormalities. The os sometimes appears semi-dilated—"cancerous ectropion"—and acquires a certain rigidity owing to the infiltration of the adjacent parts. The mucosa overlying the affected area may be found adherent and eroded. As the disease progresses the uterus becomes more bulky than natural. At a later stage bossed excrescences, nodulations, and ulceration are met with, together with signs of infiltration. The precise form assumed by the morbid growth depends upon whether its tendency to burrow or its tendency to project from the free surface predominates; the latter is the more usual in growths arising from the portio vaginalis. These excrescences are generally rather soft and very friable; hence fragments can easily be detached, and they bleed freely when touched. When infiltration predominates there is marked tumefaction and ill-defined induration. Cancerous ulcers usually present as irregular excavations with raised bossy edges in the midst of infiltrated areas. In the epidermoidal varieties of the disease the ulcers are often shallower and flatter, the induration is more localised and pronounced, while forms resembling rodent ulcer are occasionally met with. The parts are usually so little sensitive that the requisite manipulations cause hardly any pain. Cancer of the body of the uterus nearly always causes great enlargement of the part, but in certain rare cases of this kind the portio may present hardly any obvious alteration, and in some instances it completely disappears, the os being flush with the vault of the vagina. The next step is to determine whether any extension of the disease to the surrounding parts has taken place. Normally the uterus is freely mobile. Infiltration of the parametrium, &c., causes diminution of this mobility, and in advanced cases the uterus becomes quite fixed, while at the same time it is depressed, so that the vagina appears to be shortened. It is in the vicinity of the vaginal vault, especially in the anterior cul-de-sac, that the earliest evidence of infiltration is likely to be felt as ill-defined thickening and hardness; later the disease spreads in the anterior vaginal wall towards the base of the bladder, and subsequently in the posterior cul-de-sac towards the rectum. By deep palpation directed upwards and outwards close to the lateral borders of the uterus the presence of cancerous deposits in the broad ligaments, the adjacent lymph glands, &c., may be detected. In like manner, by palpating in the direction of the ovaries, their condition may be ascertained. On the withdrawal of the examining finger it will generally be found to be blood-stained and fœtid if the disease be cancerous. When the indications point to the existence of cancer high up in the cervical canal, or in the interior of the uterus, out of reach of the examining finger, it may be necessary to dilate the cervix in order to determine its precise nature and extent. In cases of this sort the uterine sound is a dangerous and not very serviceable instrument to employ; hence its use should be reserved for experts, and the less even they resort to it the better. Palpation per rectum is capable of affording valuable information. By this method infiltration of the parametrium, of the lymph glands, and of the corpus can readily be detected.

As aids to the diagnosis it is well to bear in mind the following considerations. In about one-sixth of all cases of uterine cancer some tumour can be detected sooner or later in the hypogastric region by bimanual palpation, &c. This implies that the body of the uterus is affected. The condition of the lymph glands in the groins should be examined, for in rather more than one-fourth of all cases those of one or both sides became obviously enlarged in the course of the disease. In cancer of the cervix this is always a late symptom, but when the disease starts at (or near) the fundus the inguinal glands may be affected at a comparatively early date. The left supra-clavicular region should also be examined, as in advanced cases of uterine cancer the lymph glands in this situation are apt to become enlarged (Troisier's symptom); but it must be borne in mind that any intra-abdominal cancer may cause this adenopathy. Œdema of one or both lower limbs—owing to pressure of enlarged glands, &c., on the iliac veins—is met with in about 15 per cent. of all uterine cancer cases. When there is a question of an operation being necessary, or when the diagnosis presents any difficulty, the examination of the patient should be conducted under anæsthesia, as the requisite manipulations for forming a correct diagnosis are thereby greatly facilitated. To complete the investigation fragments of the diseased area must be removed and submitted to microscopical examination. Simon's sharp curette is usually employed for this purpose. It is necessary for the detached fragments to include portions of the musculature, for unless it can be demonstrated that the proliferating glandular structures have actually invaded the musculature, the cancerous nature of the disease may in certain cases be open to doubt.

III.—DIFFERENTIAL DIAGNOSIS.

The ancients confounded with cancer many forms of intractable ulceration, which have since been discriminated as non-cancerous. Unfortunately, this discriminatory process has not made so much progress in uterine pathology as in some other directions; hence we still find various non-cancerous uterine diseases habitually confounded with cancer. Among these, recent researches have shown that certain tuberculous, syphilitic, and some other ulcerative processes must be included. We now know that tuberculous disease of the uterus is much less rare than was formerly believed; indeed, according to some statistics it is of commoner occurrence than cancer. The corpus is the part usually affected, although in a considerable number of cases the disease centres in the cervix or portio. Most cases are secondary to tuberculous disease elsewhere, but it is sometimes a primary affection.

The symptoms of uterine tuberculosis closely resemble those of cancer; but hæmorrhage is a less marked feature. In tubercle of the corpus the part is much enlarged, its walls are thickened, and its cavity is distended with yellowish fluid containing curdy, caseous flakes or thick magma. On removing this, irregular patches of rather deep, sharply punched-out ulceration are seen, each ulcer being covered by a deposit of yellowish, caseous matter. The adjacent parts are thickened by tuberculous infiltration, in which yellowish, opaque granules are often noticeable. The cheesy nature of the discharge, the co-existence of tubercle elsewhere, together with the absence of floodings, may cause the true nature of the disease to be suspected. Even when the disease is tuberculous, however, microscopical examination

of the discharge usually fails to reveal the presence of the special bacilli. In order to effect the diagnosis, therefore, fragments of the diseased tissue must be removed by the curette, when the characteristic giant cells surrounded by lymphocytes will be met with, although complete tubercles, as defined by Virchow, are seldom present; within these giant cells or in their vicinity tubercle bacilli will generally be found. Tuberculous ulceration of the portio presents similar characters to the foregoing, the part being markedly thickened and indurated; hence in most cases the resemblance to cancer is so great as to necessitate the aid of the microscope for making a correct diagnosis. Under such names as "lupoid ulceration," "corroding ulcer," "ulcus rotundum simplex," "ulcus serpiginosum," "ulcus phagedænicum corrodens," &c., various ill-defined forms of intractable ulceration have been described having the following characters:—The edges of the ulcer are sharply cut, slightly raised, hard, and sometimes tuberculated; the base is smooth, bright red, and not indurated, and it has but little tendency to bleed. The ulceration spreads very slowly, invading adjacent parts and completely destroying them. The process begins in the vicinity of the os, passing thence to the vagina, and exceptionally to the cervix and corpus uteri. Its duration is often upwards of ten years. It seems probable that under these headings various forms of tuberculous (lupus) and syphilitic disease are included, as well as "rodent ulcer." Ulcerations of this type are not very common, since I have met with only three instances in seventy-nine consecutive necropsies for supposed uterine cancer.

Syphilis may attack the uterus in its primary, secondary, or tertiary forms, but with the exception of the first-named these manifestations have been very little studied. Chancres of the portio, like chancres elsewhere, present as solitary indurated, painless, shallow ulcers of no great size, emitting but little discharge, and they do not bleed readily; sometimes they are attended by widely diffused induration and rigidity. Secondary manifestations must be looked for. Soft chancres may be recognised by their multiplicity and other special characters. Secondary syphilides of the portio take the form of condylomata and erosions. These differ from similar forms of cancerous disease in that they are usually multiple and non-indurated; moreover, the patient will present syphilitic manifestations elsewhere. Of tertiary syphilitic affections of the uterus not much is known. Several pathologists have, however, recently described instances of gumma and diffuse syphilitic infiltration of the portio; and no doubt such lesions are much commoner than is generally believed. Ulcerated syphilides of this kind closely simulate cancer in their clinical features, but they can be discriminated by the aid of the microscope.

Sarcoma of the uterus is a rather rare disease that chiefly affects the corpus, when it gives rise to symptoms so similar to those of cancer that in most cases the differential diagnosis can only be made by the microscopical examination of fragments removed with the curette. Sarcomata sometimes arises at a much earlier age than cancer, and they progress with great rapidity. The commonest form presents as a circumscribed tumour, having much resemblance at first to a fibro-myoma. Certain of these growths (deciduoma malignum) supervene in connexion with pregnancy, and they are especially apt to follow "mole" pregnancies. The racemose or grape-like sarcomatous masses, that sometimes grow from the portio, can often be distinguished from cancerous excrescences without the aid of a microscope, by the obviously myxomatous nature of the detached fragments.

Some chronic inflammatory affections of the uterus, especially such as are attended with exuberant glandular overgrowth and the formation of numerous small cysts, may easily be mistaken for cancer. In the corpus "fungous endometritis" is the lesion that most resembles cancer; it causes marked enlargement of the organ and metrorrhagia. In the portio inflammatory lesions simulating cancer are produced by papillary outgrowths ("cauliflower excrescences"), as well as by indurated, hypertrophied, and fissured conditions of the cervix with which shotty cysts are so often associated. In differentiating it should be borne in mind that the course of inflammatory affections is generally chronic, that pain is well-marked, especially in the ovarian regions, and that the discharge is not fœtid; whereas in cancer the conditions are just the converse; moreover, in chronic inflammatory affections the uterus is generally mobile and tender, the vagina is not implicated, and there is no diffuse nodular induration. In dubious cases the ultimate decision must rest with the histologist. Certain conditions associated with putrid sanious discharge, such as may be caused by sloughing polypus or fibroid, retained placental fragments, putrid blood-clots or membranes, may give rise to symptoms suggestive of cancer; and in this category impending abortion at an early stage should be included. It must be remembered, however, that pregnancy often complicates cancer. For the diagnosis of these and other conditions simulating cancer, reliance must be had chiefly on a correct appreciation on the *ensemble* of the case.

In conclusion, no uterus should ever be excised for supposed cancer, until the diagnosis has been confirmed by microscopical examination.

IV.—LATENT CASES.

Here it is desirable to call attention to the fact that cases sometimes occur in which all the symptoms of cancer are absent; or they are so little marked as not to attract even the patient's attention, although the disease may have made great progress. In some instances of this kind, women have been known to have continued their usual avocations almost to the end, in blissful ignorance of their condition; and in many cases the true nature of their malady has never been recognised at all, until revealed by post-mortem examination. The following illustrative cases are highly instructive.

CASE 1. *Cancer of the cervix with dissemination in the humerus mistaken for primary sarcoma of that bone; amputation at the shoulder-joint.*—This case presents some remarkable features. The patient, aged fifty-two years, was admitted into University College Hospital[1] on account of painful swelling at the upper part of her right arm of two months' duration. She complained also of considerable loss of power in the part, which began to weaken about a year ago. On examination there was found great enlargement of the upper end of the humerus, which extended as far down as the insertion of the deltoid. The overlying skin was reddened and the subcutaneous veins were much enlarged. There was great loss of power in the limb, and constant "gnawing" pain was experienced, which extended down to the elbow. Passive movements at the shoulder-joint could be effected, but they caused much pain. There was a family history of phthisis and a sister had died from internal cancer. Her previous health had never been good. The swelling was aspirated, but only some blood and fatty matter came away. Under these circumstances it was resolved to amputate at the shoulder-joint. During manipulation prior to operation the bone fractured through the surgical neck. The part was removed by cutting the deltoid flap by dissection and the internal flap by transfixion with antiseptic precautions. The upper part of the humerus, as far down as the insertion of the deltoid, was found to be involved by a malignant growth, but the cartilage of the head was intact. The wound healed quickly, but the patient's health, nevertheless, progressively deteriorated, and she died about seven months after the operation. Some time prior to this it was discovered that she was suffering from ulcerated cancer of the cervix uteri, to which the cancerous tumour of the humerus was evidently secondary. Histologically examined the latter growth consisted of fibrous stroma containing numerous small spaces, for the most part lined by but a single layer of short columnar cells, but some of the spaces were filled with cells of a more flattened type, the appearances being similar to those usually met with in cancer of the cervix uteri.

CASE 2. *Cancer of the cervix with infiltration of both ureters and consequent renal atrophy, in which the only symptoms manifested were those of chronic nephritis.*—The patient, aged fifty-six years, came under the care of Péron[2] with symptoms of chronic nephritis of five months' duration. Anasarca had been present for two months; and the face had the characteristic aspect of Bright's disease. There was a typical "bruit de galop." The urine was clear, excessive in quantity, and it contained a little albumin. She died two months later with symptoms of uræmia, never having presented any symptom suggestive of uterine disease. The necropsy revealed cancer of the cervix uteri between the internal and external os, the portio not being obviously affected. The base of the bladder and the adjacent parts of both ureters were infiltrated. There were right hydronephrosis and left pyonephrosis. The right kidney was

[1] University College Hospital Reports, 1888, pp. 92 and 142.
[2] Bulletin de la Société Anatomique de Paris, January, 1896.

educed to a mere sac; the left kidney was of normal size, but presented signs of chronic interstitial nephritis, on which acute inflammation and miliary abscesses had recently supervened. The other organs were normal, there being no marked hypertrophy of the heart. In the pelvis and in the right iliac region were several cancerous lymph glands.

CASE 3. *Cancer of the corpus with dissemination in the peritoneum that simulated cirrhosis of the liver.*—An exceedingly intemperate woman was under the care of Constantin[3] with ascites and other symptoms of cirrhosis of the liver. The urine was loaded with urates. No indications of pelvic disease were noticed during life. At the necropsy the body of the uterus was found to be extensively affected with cancer, the cervix being but slightly diseased. There was extensive cancerous dissemination throughout the pelvic and abdominal peritoneum and in the pelvic and prevertebral lymph glands.

Preston.

CASE OF ACUTE ASCENDING MYELITIS COMPLICATING MEASLES.

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A SCHOOLBOY aged fourteen years, of nervous and somewhat morbid temperament, was attacked with measles on March 30th, having been during the day in school and, presumably, in his usual health. Next day the rash came well out all over his body, and during the succeeding night he had a sharp attack of diarrhœa and vomiting, which subsided next morning, April 1st. The patient exhibited all the usual signs of a well-marked typical case of measles; the temperature had been up to 104° F., but fell below this during the day. On the 2nd the symptoms declined; the boy reported himself as feeling comfortable except for pain in his back, and chatted with his parents. The evening temperature was 99°. On the 3rd the temperature was normal. The patient informed his mother that he had passed no urine since the previous evening, and though this did not seem a very unusual or remarkable circumstance he was evidently troubled in his mind about it; later in the day he complained of vague pain about his body and legs and declared his conviction that he was going to have influenza; in the afternoon though the urine was still retained the bladder was by no means distended. In the evening a dose of castor oil was given in the hope that the urine might be passed when the bowels acted; the oil did its duty in due course but little or no urine was passed; and at 11 P.M. a catheter was used and about half a pint of urine was drawn off. The boy bore the catheterisation with what appeared to be extraordinary equanimity and afterwards said he was fairly comfortable, but had "sort of influenza pains" in his toes and legs. The temperature was 103·4°. The patient spent a restless night, and on the 4th at 9.30 A.M. he was found to have complete paraplegia with absolute anæsthesia from his toes up to his axillæ, where there was very slight sensation. Thoracic movement was much impaired, the superficial reflexes about the thorax and the abdomen were very slight, and the reflexes of the lower extremities were entirely absent. The temperature was 103·4° but by 11.30 A.M. it had risen to 104·4° and the patient was drowsy and complained of pain in the hands and the forearms, and the grasp of both hands was decidedly weak. The catheter was passed. At 2 P.M. the temperature was over 105° and motions had been passed unconsciously. At 5 P.M. he was drowsy but conscious; the speech was not affected; the temperature fell slightly, but at 8 P.M. it had risen to 107° and the patient was almost unconscious. There was absolutely no movement of the thorax; the respirations were 32 and entirely abdominal. At 11 P.M. they numbered 46 and coma had supervened. At 2 A.M. on the 5th the respirations were 50 the temperature was 107·5°, and the patient was still able to swallow. At 5.20 A.M. the temperature taken immediately after death was 109·2°.

Remarks.—This case occurred during an extensive epidemic of a decidedly virulent type of measles. In many instances the rash was very slow in making its complete appearance; in one case at least an entire week intervened between the first appearance of "mottling" and the full development of the rash. As a rule the rash was unusually dark and in some cases it approached a hæmorrhagic type. As to the boy's constitution and general health nothing remarkable seems to have been noticed; but his father informed me that his memory was extremely defective, that he was therefore very "backward" and, consequently, at times despondent and hopeless. The rare occurrence of this fatal disease as a sequel to the exanthemata may perhaps render these short notes of interest to the profession.

Eton.

[3] Nouvelles Archives d'Obstétrique et de Gynécologie, July, 1892.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

A CASE OF ABSENCE OF THE THYMUS GLAND IN AN INFANT.

BY ALFRED CLARK, L.R.C.P. & S. EDIN., L.F.P.S. GLASG.

ON Aug. 4th, 1896, a male child aged eight months was brought to me by his mother on account of persistent swelling of the hands and feet. The family history was unimportant and the parents were both healthy. The previous history of the case was as follows. At birth the child was apparently well nourished and healthy and continued to be so until six months old in spite of being fed from a dirty bottle and being otherwise neglected. About the sixth month the mother noticed a slight swelling and coldness of the hands and feet, and on that account took the patient to a medical man. The swelling, however, increased and spread to the legs, and on Aug. 4th the case came under my care. The child was then considerably swollen, and "waxy"—or, rather, "tallowy"—in complexion; the heart and lung sounds were normal. There was no cyanosis. The fundi oculorum were normal. The bowels were relaxed; the motions were greenish and offensive. The urine (1016) was acid; there was no albumin. There was slight excess of urates. The quantity of urine passed was not notably deficient. The swelling gradually increased and spread in spite of diuretic and tonic treatment until the eyes were almost closed and the hands, arms, feet, and legs were so distended with fluid as to feel like a firmly-stuffed cushion. On Sept. 1st I noticed two symmetrical ecchymoses, one on the inner side of each supra-clavicular fossa and about the size of a florin. The temperature remained normal and the pulse and respiration grew weaker as death approached, but were in no way remarkable. On Sept. 5th the child died.

Necropsy.—At the necropsy, made twelve hours later, I found the right kidney healthy; the left was about twice the size of the right, and its pelvis and ureter were dilated, the latter to the size of the little finger and the former to contain about two fluid drachms. There was no communication with the bladder on the left side, although the ureter was pervious as far as that organ. The thymus gland was completely absent, the upper part of the anterior mediastinum being empty and the pleuræ in apposition. There was no fibrous tissue to mark the position of the absent organ.

Remarks.—So far as I know this condition of things is quite unique as regards the absence of the thymus gland, and is interesting as proving that it is compatible with fair health and normal development—at all events, for the first six months of life. The symmetrical ecchymoses arising without apparent cause harmonise with the recorded connexion between this gland and hæmophilia. I think that the renal abnormality only contributed in a subsidiary degree to the fatal result, as the hydronephrosis was slight and the right kidney quite healthy and apparently adequate for the necessities of the body, for no uræmic symptoms were present and the urine passed was not deficient. There were no symptoms of acromegaly. The digestive functions improved under treatment and the appetite remained good to the last.

Leicester.

AN ACEPHALOUS INFANT.

By W. J. C. COULTHARD, M.B., C.M. EDIN.

ON Aug 9th I delivered a primipara aged twenty-three years of a seven months acephalous infant. The mother had been under treatment some months for anæmic debility and had suffered mentally in addition. Labour lasted five or six hours and terminated by the birth of this acephalous child, the head having presented. During labour an excessive amount of liquor amnii escaped, over three quarts being received in utensils, although the first gush was lost. The child, a female, had the typical toadhead mounted on a short thick neck, had a spina bifida extending wedge-shaped from the cervical to the lumbar region, the apex of the wedge being downwards, and had a right talipes equinovarus. The child never breathed and I used no means to induce her to do so. The infant was small, weighing about three and a half pounds, but was muscular, and in proportion to the size was heavily built about the chest, shoulders, and neck. The placenta and membranes appeared to be normal, but the cord was short and thin.

I record this case chiefly because of the way in which the facts do not coincide with the theory of intra-uterine amputation, alluded to by Dr. J. L. Kerr in his communication to THE LANCET of Aug. 8th last. The existence in this case of the spina bifida remains unexplained by the hypothesis of intra-uterine amputation having caused the cranial defect. The presence, too, of the considerable degree of hydramnios renders it unlikely that amputation should have occurred. The theory of arrested development seems to me much more completely to meet all the facts With regard to the hydramnios that condition was, I think, probably consequent on the spina bifida, which, though well covered in its upper half by skin, was not so well protected in the lower, some parts, indeed, being there quite exposed.

Maryport, Cumberland.

CASE OF INTESTINAL OBSTRUCTION FROM EATING UNRIPE BLACKBERRIES.

By J. GUEST GORNALL, M.A., M.B. CANTAB.

ON Sept. 1st last I performed a post-mortem examination on a child who died from intestinal obstruction under such peculiar circumstances as to make me think it worth while to record the details. Unfortunately I did not see the child before death, and my father, who was acting as my deputy during my temporary absence from home, was only sent for when the patient was *in articulo*. Inquiries, however, have elicited the following history. A healthy and well-nourished boy aged five years was absent from home nearly all day on Aug. 28th. He went with other children into the fields and stayed there till towards evening, and during this time his sister stated that he ate many blackberries. On his return home he complained of pain in the abdomen, but went to bed and had a good night. The following day (Aug. 29th) he still had the pain and was kept in bed and given a dose of castor oil, but the symptoms did not seem to have been sufficiently severe to make the parents summon medical aid. The child continued to be in pain all day and in the evening began to vomit, and there was a slight action of the bowels and also much thirst. The vomiting continued till about 3 A.M. the following morning (Aug. 30th); whether it was ever stercoraceous I have been unable to ascertain. Medical aid was summoned some hours afterward, but the child became rapidly worse and died at 10.30 A.M. the same day. The necropsy revealed nothing beyond the fact that while the intestines were generally empty, and there was some reddening of the gut at various points, though no exudation of lymph or loss of lustre of the peritoneal covering, the intestine was completely obstructed by the impaction just above the ileo-cæcal valve of a teacupful of green, unripe blackberries, which had apparently been swallowed without mastication. There were also in the mass wheat-grains and others bodies of uncertain nature.

The short duration of the whole illness, and especially of the vomiting, and the slight changes in the intestinal wall found after death make it seem to me that shock consequent on the severe pain experienced played an important part in causing the fatal issue. Possibly the administration of the dose of castor oil had a good deal to do with the impaction by hurrying the indigestible contents of the intestine downwards towards the ileo-cæcal valve.

Warrington.

CASE OF POISONING BY CANNABIS INDICA.

By JOHN ATTLEE, M.D. CAMB.,

CLINICAL ASSISTANT TO THE EAST LONDON HOSPITAL FOR CHILDREN SHADWELL.

A WELL-GROWN but rather pale schoolboy aged twelve years had been attending the Children's Hospital, Shadwell, as an out-patient suffering with headache. Nothing organically wrong was found beyond slight anæmia and lack of tone and he was accordingly ordered a tonic. I saw him early on the morning of Sept. 9th and found him still suffering from headache. I prescribed for him ten-minim doses of tincture of cannabis indica three times a day. He went at once to his home, which was about a hundred yards from the hospital. In about three-quarters of an hour he returned to the hospital supported by his mother, who gave the following history. On reaching home her son at once took a dose of the medicine, and in a few minutes said he felt a burning pain in the pit of his stomach and soon became strange in his manner, saying that his legs were jumping about and that he heard a ticking like a watch, that he saw the room on fire and the pictures falling down, &c. She then brought him back to the hospital with considerable difficulty. On admission he looked extremely ill, very pale, anxious, and distressed. He complained of no pain, but he was much collapsed. His pulse was 120, being scarcely perceptible at the wrist; the pupils were dilated, but acted sluggishly to light. He was at once laid on a couch, was covered with blankets, and was given two drachms of brandy in hot water, and immediately after this ten grains of citric acid in syrup of lemon. A blister was applied to the nape of the neck. He soon began to revive, his colour improved, and in about two and a half hours he had recovered and said that he felt quite well—his headache had gone and he was able to walk back to his home. On examining the bottle it was seen that the correct dose of medicine had been taken and it was ascertained that there was no mistake in the dispensing. Some of the tincture from the same dispensing bottle was given to another child the same morning and subsequently with no ill-effects. It was not a freshly made tincture, having been in stock and in use for about two months.

The interest of the case lies in the smallness of the dose which caused the poisoning and also in the short duration of the symptoms. In looking up the literature on the subject I can only find one other case recorded of so small a dose causing toxic effects, and this was recorded by Mr. Roche Lynch in THE LANCET,[1] and is mentioned in Taylor's work on Poisons. It was the case of a woman, aged thirty years, in whom seven minims caused narcotism. I am indebted to Dr. Hayward, whose out-patients I was taking at the time, for kindly allowing me to report this case.

Brook-street, W.

[1] THE LANCET, Sept. 30th, 1871.

UNIVERSITY OF CAMBRIDGE.—Professor Bradbury announces a special class in pharmacology and therapeutics for the benefit of candidates for the Third M.B. Examination in the present term. The class will be held at the Pharmacological Laboratory, Downing College. Professor Bradbury is appointed Assessor to the Regius Professor of Physic on M.D. Acts; Professor Allbutt an Elector to the Downing Professorship of Medicine; and Professor MacAlister an Elector to the Chair of Zoology and Comparative Anatomy in the room of the late Sir G. M. Humphry. On the first opportunity since the passing by the Privy Council of the new disciplinary statute action has been taken to deprive of his degrees of Bachelor of Arts and Bachelor of Medicine F. C. Scott Sanders, now in penal servitude for forgery. It is stated that over twenty graduates of other universities have taken advantage of the new arrangements for post-graduate work and are in residence in Cambridge as "advanced students." The important step taken by the University last term has thus been amply justified

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ROYAL FREE HOSPITAL.

A CASE OF ULCERATIVE ENDOCARDITIS TREATED WITH ANTI-STREPTOCOCCIC SERUM; RECOVERY.

(Under the care of Dr. SAINSBURY.)

THE serum-therapy of pyogenic affections has of late been attracting attention in this country. Mr. Ballance and Mr. Abbott[1] recently recorded a case of hæmorrhagic septicæmia treated by anti-streptococcic serum with recovery. On Sept. 12th last Dr. P. Coleman and Mr. T. G. Wakeling recorded in the same periodical another successful case of septicæmia treated similarly by injections of serum. In puerperal fever there have also occurred successful cases of this treatment. Malignant endocarditis is of the same class of disease, the organisms present in the vegetations being most commonly streptococci and staphylococci, and the serum treatment has already been applied to the cure of this affection. The following case is a contribution to the literature of the subject, for the notes of which we are indebted to Dr. Hugh Wingfield, house physician.

A lad aged thirteen years was admitted to the Royal Free Hospital on June 22nd, 1896, "for pain in the chest and heart." The patient first complained of pain in the chest about June 6th. He was sleepless and could not lie down in bed. He became progressively worse, had a troublesome cough, became weak, feverish, and, later, delirious at night. There was no history of rheumatism or chorea to be obtained. He had had measles and whooping-cough as a baby. On admission he seemed ill and was very dusky in colour. His skin was dry and harsh. The temperature was 103 2° F. He had a deal of cough. The cardiac dulness began in the first left intercostal space and extended to the right sternal border. The heart's apex beat was in the fifth space four inches to the left of the mid-sternal line. There was a well-marked thrill and a double murmur at the apex. In the lungs there was some impairment of note at both bases behind, with weak breath sounds and crepitations over the whole of the right side of the back. The liver and the spleen were not palpable below the costal margin. The urine contained no albumin. Fifteen grains of salicylate of soda were administered every two hours in a mixture. On June 24th he was violently delirious at night, and the temperature ranged from 100° to 101°. No streptococci had been found in the blood. On June 25th there was marked dulness over the left lung behind and increase of vocal resonance. The sputum was rusty. There had been no rigor. On the 26th a symmetrical erythematous rash appeared on the buttocks spreading to the rest of the body; this lasted five days. On July 1st streptococci were found in the blood. On the 9th there was much general improvement in the patient's condition. Treatment with liquor hydrargyri perchloridi was commenced. The temperature rose to 102° on the 20th, where it remained until the 24th. The boy was ill and drowsy; the rash had returned. The area of cardiac dulness was increasing. On the 28th the temperature was 104·4°. There was no rigor, but there was vomiting and return of cough, with bloody sputum. On Aug. 5th he seemed worse; the sputum contained streaks of blood and a clot; there was abdominal tenderness, and it was thought that the spleen was felt. The boy was very languid and took food very badly. On the 17th 20 c.c. of anti-streptococcic serum were injected. The temperature was 99·8°. This was followed by no local or general reaction. On the 18th 10 c.c. of serum were injected, and on the 20th 10 c.c. more were injected. There was a marked improvement in the boy's condition and the skin which had peeled was rapidly clearing. On the 22nd a further 10 c.c. were injected, and on the 25th another 10 c.c. On the 26th there was a return of the rash with much itching. The temperature range did not remain at normal. On the 31st the patient was up and walking in the ward and was very markedly better. The area of cardiac dulness was normal and the heart's apex-beat well internal to the nipple line. The blood was examined by the British Institute of Preventive Medicine, and it was reported that it contained no streptococci. On Sept. 1st a further 10 c.c. of serum were injected. This was followed by local and general slight reaction. The temperature rose to 102° and the patient seemed ill and complained of pain at the puncture, this pain lasting for twenty-four hours. On the 10th the temperature had been normal since the last injection, and the improvement was maintained. On the 14th the patient went out. He slept and ate well and was getting stronger daily.

Remarks by Dr. SAINSBURY.—This case of malignant endocarditis responded so promptly and satisfactorily to the serum treatment that no apology is needed for recording it. Before the injections were commenced the patient had lapsed into a condition of marked cachexia; within two or three days the improvement in the aspect and bearing of the boy was unmistakeable—he was clearer-looking, brighter, and the peeling skin cleaned rapidly. Neither local reaction at the site of the puncture nor any general reaction was observed except on Sept. 1st, the time of the last injection, when the sudden rise of temperature the general appearance of illness and the pain at the site of the injection followed so speedily upon the injection that there seemed no other explanation for the symptoms than the dose of serum. The boy, however, soon rallied and then, curiously, took a fresh start; his temperature for the first time became normal and his advance was then so rapid and uninterrupted that there was no excuse for another injection. Thus all the injections were markedly effective, but most so this last injection, which produced definite local and general symptoms. Was this reaction an unnecessary concomitant—the result of a by-product, or was it to be regarded as of the nature of a curative reaction? In a recent case of ulcerative endocarditis under my care at the Victoria Park Hospital for Chest Diseases the anti-streptococcic serum failed to arrest the disease and seemed to have no beneficial effects; in this case, however, there was, in addition to the endocarditis, grave kidney disease with cortical destruction, which may have accounted for this; the disease was, moreover, in a more advanced stage and of more virulent type. Special thanks are due to Dr. Hugh Wingfield, who, as house physician, has had the immediate conduct of the case, also to Miss Knight, M.B. Lond., the pathologist.

[1] Brit. Med. Jour., July 4th, 1896.

DINORWIC QUARRIES HOSPITAL.

A CASE OF CONGENITAL DEPRESSION OF THE LEFT FRONTAL BONE WITH SYMPTOMS SIMULATING CHOREA; TREPHINING; RECOVERY.

(Under the care of Mr. R. H. MILLS-ROBERTS.)

THIS interesting case should be included under the heading of traumatic epilepsy arising, as it appears to have done, from a condition of the cranial vault which most probably resulted from injury at birth. There are not many published cases which present a similar history, for many years elapsed before the abnormal growth of bone was sufficiently large to produce irritation. We take it that the symptoms were due to the condition of the under-surface of the piece of bone removed by the trephine and that the improvement which followed operation was not due to any temporary readjustment of intra-cranial pressure. The causes to which traumatic epilepsy have been assigned are as follows[1]: "(1) a neuralgic cicatrix in the scalp is the starting-point of reflex convulsions; (2) chronic osteitis of the part of the skull struck, giving rise to thickening and induration in the bone; (3) from depression of bone, fracture of the inner table, and the formation of osseous stalactites pressing on the surface of the brain in the motor area; (4) from chronic thickening of the dura mater; (5) from cystic collections of fluid in the membranes; (6) from scars or other lesions in the area of the cortical motor centres." An interesting case[2] has been recorded in which a groove more than three inches long in the skull, the result of injury from forceps at birth, was

[1] Erichsen: Science and Art of Surgery, vol. i., tenth edition.
[2] Dr. Lane: Annals of Surgery, St. Louis, November, 1891.

removed by surgical means at the age of sixteen years, and epileptiform symptoms of two years' duration relieved. In another case[3] an epileptic woman aged twenty-two years was trephined and some depressed, eburnated bone removed, with relief of symptoms; the use of the forceps at birth had caused the traumatism in the first instance. In another case,[4] a child aged six years, at the operation (successful) for relief of epilepsy a spicule of bone was found projecting into the brain; there was no history of injury to the part, but it is probable that some was sustained at birth, for the symptoms began at six weeks of age.

The patient, a boy aged fourteen years, first attended the hospital in January, 1896, complaining of incontinence of urine at night. From this he recovered. One day during the latter part of January, while having supper after returning from the quarry, his parents noticed that his manner and conduct were peculiar. He did not take his food as usual. He talked at random and did not appear to thoroughly understand what was said to him. His conduct, however, was not violent. These symptoms only lasted a few minutes, and the boy went to his work as usual the next day, but was taken home early owing to a repetition of similar symptoms. These attacks continued on and off for the next three or four weeks, occurring sometimes two or three times a day, though now and again a day or even two days would be missed. During these times, between the attacks the boy was dull, morose, and melancholic, whereas his normal condition was bright and cheerful. During the latter part of February the attacks occurred nearly every morning while the patient was dressing or getting out of bed. They now increased in frequency and severity; the patient often becoming delirious—shouting and talking violently—beating his head and hands together. At times he complained of severe frontal headache. He was very exhausted and would often sleep after an attack. About this time (the end of February) it was noticed that during the attacks parts of the body were being convulsed, at one time the legs and at another time the arms or head. These convulsive attacks gradually increased in severity, but as the severity increased the talking and delirium diminished and gradually disappeared altogether. The patient was admitted into hospital on March 24th so that the case might be watched, as hitherto Mr. Mills-Roberts had not seen an attack. On this day and the next there were four not very severe chorea-like attacks, the convulsions attacking the whole of the body, but lasting only a few seconds. The patient was apparently well but dull during the intervals. Trephining was recommended, but the boy became frightened and ran away on the 25th. Mr. Mills-Roberts was asked to see the patient again in a few days, being told that he was much worse. He did see him, and the boy was re-admitted on April 10th, being persuaded to stay in the hospital by the companionship of other boys. It was correct that the attacks were much worse. As a rule the patient was warned of a coming attack by violent frontal headache, though at times the onset was so sudden that he would fall in the middle of the ward before help reached him. The convulsions affected in a greater or less degree the whole body. Like chorea they were remarkable for their disorderly character, and were regular only in their irregularity. There might be violent spasms of any or all of the muscles of one or both arms, these being perhaps accompanied, preceded, or followed by a similar condition of the legs, the head and neck, and the back. The boy was conscious the whole time. His pupils were dilated and his countenance was pale. In a minute or so all would apparently be quiet. On being asked if he was better he would look up helpless and tired, being apparently quite exhausted. Sometimes he would answer Yes or No, but oftener, before he had time to answer, the convulsions would re-commence, so that it was found better to leave him alone and to ask no questions, but only endeavour to prevent him injuring himself during the attacks. One attack might last as long as five minutes, at the end of which the patient would fall back on his bed quite worn out, to suffer, perhaps, from more or less violent frontal headache for as long as two hours afterwards. In the hospital he generally had one or two attacks like this in a day; one day he had three. Before admission he was said to have had as many as twelve in one day. The urine was normal, as was also the fundus oculi. The patellar reflex was slightly exaggerated. On April 19th the operation of trephining was performed. A semicircular flap was raised from the bony depression, the position of which corresponded with what should have been the frontal eminence. The pericranium having been dissected up, a one-inch trephine was applied about the middle of the depression. The inner plate of the crown removed was very much thickened and its inner aspect was tuberculated, the tubercle being rather larger than a split-pea. The dura mater appearing normal the pericranium was replaced and the skin flap was sutured. There was no drainage. The wound healed by first intention, and the patient left the hospital seventeen days after the operation apparently well. The fits had left him and his general condition was bright and cheerful.

Remarks by Mr. MILLS-ROBERTS.—The case is reported somewhat in detail as it seemed worthy of record. It is now six months since the operation and there has been no return of the fits; the boy's condition is in every way satisfactory, though about two months ago he had a slight temporary nocturnal incontinence of urine, and I thought the fits were possibly about to begin again. However, as yet he is free from them and I hope will continue so. It will be interesting to watch for a recurrence and, if there is, to see if it is due to scar tissue or another bony tubercle.

[3] Medical and Surgical Reporter, Philadelphia, vol. ii., 1891.
[4] Dr. Kennedy: Medical Bulletin, Philadelphia, July, 1892.

Medical Societies.

MEDICAL SOCIETY OF LONDON.

President's Address.—Abdominal Section Performed a Second Time on the same Subject.

THE first meeting of this session of the Medical Society was held on Oct. 12th, the President, Mr. REGINALD HARRISON, being in the chair.

Mr. REGINALD HARRISON delivered the presidential address on "The Treatment of some Forms of Albuminuria by Reni-Puncture." He said that certain cases of albuminuria had come under his notice in which he had performed an operation for the relief of some morbid condition which was supposed to exist but was not found when the kidney was exposed; the symptoms however were relieved and the condition of the urine improved. This had led him to think that in certain cases of albuminuria good might result from puncture of the kidney. He related three cases in which he had so exposed the kidney:—1. A boy aged eighteen years was suspected of having suppuration around the kidney following scarlet fever. There was lumbar pain, and the urine was albuminous and contained casts. A small lumbar incision was made and the kidney found to be tense and engorged. An incision was made through the capsule, and there was a full discharge of blood and urine; the wound healed on the tenth day. The urine now became abundant, the albumin lessened, and then disappeared altogether, the boy making a good recovery. 2. That of a man aged fifty years who worked underground. He had presented symptoms of of renal calculus for some time. Three months after being first seen his urine was constantly albuminous, and he had pain in the right lumbar region. The kidney was exposed, but no stone was found. The condition of the patient improved, the urine became normal, and the patient remained in good health. 3. That of a woman aged forty-four years who had had hæmaturia for one year and pain on pressure over the left kidney, with albuminous urine at times. There was some history of her having passed a calculus at one time. A lumbar incision was made and the kidney was found to be swollen and tense. This was incised and free drainage of urine and blood ensued. The woman recovered, the urine becoming normal. The first of these cases he considered to be scarlatinal nephritis, the second to be due to cold, and the third a subacute attack following influenza. He then referred to two cases of movable kidney (published by Dr. Newman of Glasgow in the *Medical Week*, Jan. 6th, 1896, p. 29) in which the albumin and casts which were present before the operation disappeared entirely after the kidney was fixed, and also to another case under the care of Dr. Hoeber of Hamburg, in which relief had followed incision into the right kidney. Having referred to the views of Sir Thomas Grainger Stewart and Sir Thomas Watson on the consequence of hyperæmia in the initial stage of nephritis, he

went on to point out the disastrous effects which increased tension produced in such organs as the eye and the testicle and the relief which resulted in these cases from operative interference. As both kidneys were usually similarly affected it might be urged that both organs would have to be submitted to the same treatment. This did not necessarily follow, as the sympathy existing between the two organs was such that impression exercised on the one usually afforded relief to the other, as shown by his cases. In order to illustrate this point he narrated the case of a man aged thirty years who had received an injury to the loins and subsequently passed a small quantity of blood in the urine. The patient had considerable pain and tenderness over the right loin, which was discoloured. The right kidney was exposed and some extravasated blood was removed. A small trocar was thrust into the kidney in three places and a small incision made through the capsule. The secretion of urine, which before the operation had been scanty, increased to more than double in the twenty-four hours succeeding the operation. All the symptoms were relieved and the patient made a good recovery. Mr. Harrison then narrated the case of a girl aged seven years who died four days after the onset of scarlet fever, with almost complete suppression of urine. The kidneys were found congested to such a degree that it was not surprising that they were unable to secrete. It was in such cases as these and in certain cases of chronic albuminuria following scarlet fever that he thought operative interference could be advantageously practised. With regard to the operation an incision in the loin of moderate size should be made, so that the operator could explore the kidney with the finger. The kidney should be punctured with a needle and possibly the capsule should be incised, and the wound should be packed with gauze so as to provide free escape for blood and urine.

Mr. JOHN D. MALCOLM read an account of twenty-six cases in which Abdominal Section had been performed a Second Time. The interval between the first and second operation was in one case fourteen years and in another two hours. He pointed out that his cases illustrated a considerable number of complications, accidents, and causes of death which might occur in abdominal surgery.

CLINICAL SOCIETY OF LONDON.

Punctured Wound of the Right Ventricle of the Heart.—Aseptic Inflammation following the Operation of Tapping in Certain Hydroceles.—Case of Hyperpyrexia with Double Lobar and Croupous Pneumonia.—Very Large Hydatid Cyst of the Liver involving Right Pleural and Peritoneal Cavities; Abdominal Section; Recovery.

THE first ordinary meeting of the session was held on Oct. 9th, Dr. T. T. WHIPHAM being in the chair.

Mr. W. G. SPENCER, in a case of Punctured Wound of the Right Ventricle of the Heart followed by Recovery, showed a specimen from a man aged twenty-five years who during a fight was stabbed in four places. One was over the left third costal cartilage, two in the abdominal wall, and one incised wound of the left temple. The patient was brought to the hospital pulseless and unconscious, bleeding having practically stopped. He began to revive on the application of the usual remedies, including the infusion of two pints of saline fluid by Mr. Tippett. When seen by Mr. Spencer there was no evidence of perforation in the case of either the thoracic or abdominal cavities. During the first week progress was favourable. On the eighth day, however, after some premonitory signs, the patient suddenly lost a pint of blood from the thoracic wound. With the patient under ether Mr. Spencer passed his finger through a wound in the second left intercostal space close to the sternum and touched a large vessel having a low tension and in which there was a whirring current with each systole. On relaxing the finger-pressure blood welled up freely. No spouting artery could be felt. Considering from the course of the left internal mammary artery that it was not wounded and in view of the danger of opening the pleural cavity by enlarging the wound no attempt to apply a ligature was made. The wound was plugged firmly by wedging the strip between and behind the ribs, sternum, and intercostal membrane. Two days later there was some leaking and the plug was replaced by another strip of gauze two feet long by one inch in breadth, about half a pint of blood being lost during the process. Between the eighth and seventeenth days the plug was gradually extruded. Whilst about six inches still remained another sudden hæmorrhage of from one to two pints occurred which ceased when Mr. Tippett again plugged firmly. There was no more bleeding. The plug was all pushed out by the twenty-seventh day, leaving a superficial wound, which healed about six weeks after the accident. Meanwhile, nothing abnormal had been heard in the chest except a faint murmur like that of anæmia. During convalescence a cold abscess near one of the abdominal wounds required incision and the patient had a severe attack of ulcerative stomatitis. The patient remained very anæmic; he had to attend a long trial, after which he felt exhausted, gradually got weaker, and without presenting any special symptoms died seventy-nine days after the accident. Post mortem Dr. Hebb found that the scar in the left second intercostal space corresponded with a firm scar in the pericardium, and this with a linear depressed scar about 5 mm. long on the surface of the right ventricle, whilst on the endocardium opposite was a fine bluish line which was taken to be the firmly healed cicatrix of a minute perforation of the right ventricle just below the pulmonary valves. No sign of any other vessel being wounded nor any clot inside or outside the heart or large vessels was found. Both lungs were the seat of chronic fibroid phthisis and were universally adherent to the chest wall. The liver showed cirrhosis as well as the scars of old gummata and there was extensive genito-urinary disease following stricture, including pyonephrosis destroying one kidney and an abscess between the bladder and rectum in connexion with chronic prostatitis. Mr. Spencer remarked on the healing of the wounds in a man affected by tuberculosis, syphilis, and septic inflammation subsequent to gonorrhœa and alcoholism, on the character of the bleeding, and the rapid loss of blood with such small force as to be restrained by a plug, the healing of the perforated ventricle as depending upon its small size, and the low blood pressure in the ventricle during systole compared with that in a large artery. Had the man been healthy there would doubtless have been complete recovery, leaving no defect.—Mr. WALSHAM questioned whether the wound did actually penetrate the wall of the ventricle and suggested that the hæmorrhage arose from a wound of the coronary artery. He thought it advisable that microscopical examination should be made of the wound in order to decide the point.—Mr. MAKINS suggested that in a similar case the pericardium might be opened and the wound sutured.—In reply Mr. SPENCER said he was willing to submit the specimen to a committee in order to decide whether the wound did penetrate the wall of the right ventricle.—A sub-committee composed of the following members—Mr. Walsham, Dr. Herringham, and Mr. Spencer—was appointed, and has reported since that the wound had probably penetrated by a minute puncture the right ventricle.

Mr. LAWFORD KNAGGS drew attention to a Condition which sometimes Follows the operation of Tapping a Hydrocele. Three cases were described. In two castration had been performed in consequence of the uncertainty as to the nature of the swelling. In the third a correct diagnosis was made, but there was no possibility of mistaking the swelling for a testicular growth, as it was an encysted hydrocele. The cases constituted a well-marked clinical group. The history was typical. A patient presents himself with a hydrocele which is not translucent. It is tapped and the swelling disappears. In a few days he comes back with the tumour as large as before, and in the interval signs of inflammation may or may not have been present. It is again tapped, but only a very small quantity of hydrocele fluid is drawn off and the tumour does not materially diminish in size. Moreover, it feels rather more solid than a hydrocele. Should it be again explored at a later date a larger quantity of hydrocele fluid may be drawn off. In the two cases in which castration was performed a thick-walled hydrocele sac was found completely filled with an adherent bright yellow transparent clot. In the third masses of similar clot were adherent to a thick-walled sac. The conditions were clearly the result of inflammation, the coagulation being due to an inflammatory effusion containing coagulable elements. Indeed, white cells had been demonstrated in the fluid removed by the exploratory puncture in the third case. After formation the clot contracts expressing its serum. The importance of the condition lay in the danger of mistaking the apparently solid enlargement for a rapid growth

of the testis. The uncertainty on this point led to castration in the two cases in which such a mistake was possible. The non-translucent sac, the rapid formation of the second swelling, the abortive second tapping and persistence of the tumour were, however, such characteristic features as to render recognition of the real condition quite possible. Though buff-coloured clot is described as being sometimes met with in hydroceles, Mr. Knaggs had been unable to find any definite account of such cases as he had brought forward. A similar specimen in a museum was attributed to a supposed iodine injection, and in two of the cases mentioned in the paper hæmatocele had been suggested by pathologists.

Dr. FRANCIS HAWKINS (Reading) read notes of a case of Hyperpyrexia and Jaundice in Double Lobar Pneumonia in which recovery took place. Of 1904 cases collected by Dr. Hawkins the temperature exceeded 106° F. in only 15, and of these 15 cases only 4 recovered, and no case with a temperature over 106·4° recovered. The highest temperature in the fatal cases was 108·8°. In Dr Hawkins's case the temperature on one occasion reached 108·4°.—Dr. KINGSTON FOWLER thought that antipyretic measures, as opposed to antipyretic drugs, were of great value in these cases. He pointed out that the physical signs of an apical pneumonia might easily be passed over owing to the fact that while examining the back the patient's clothes are placed over the shoulders.

Mr. H. BETHAM ROBINSON described a case of very large Hydatid Cyst of the Liver involving the Right Pleural and Peritoneal Cavities which had occurred in a married woman aged thirty-four years, who came under his care in July, 1894. Rather more than five years before her abdomen began to enlarge and in three months the swelling attained its maximum. Jaundice and vomiting had been present from time to time and there had been some swelling of the legs, especially of the right; otherwise her health had been good and she had been able to get about. Four years before she was tapped and forty litres of a slightly viscid, brownish green clear fluid removed, but it rapidly re-accumulated, and she regained her former size. On examination the abdomen was very much distended, its walls being tense and the umbilical cicatrix completely effaced. The measurement at the umbilicus was 43¾ in.; halfway between the umbilicus and pubes 40½ in., and from the anterior superior iliac spine on each side to the umbilicus 11 in. Over the whole of the anterior wall fluctuation could be obtained with a well-marked thrill. On percussion the whole of the abdomen was dull in front. There was no alteration on shifting position. On the right side no colon resonance could be elicited, but on the left side there was good resonance in the flank. The cervix uteri was forced down almost to the vaginal orifice. On July 28th she was tapped midway between the umbilicus and pubes. Seventy-four ounces of a thick, yellowish brown, viscid fluid were withdrawn, which deposited on standing a reddish sediment. Bile was in the fluid and hydatid hooklets were discovered microscopically. On Aug. 15th the cavity was freely opened and four gallons, four pints, and two ounces of fluid were collected. On passing the hand into the cyst it was found to occupy quite three-quarters of the abdominal cavity, and nearly all the viscera were pushed to the left side well beyond the median line and backwards into the flank. On the right side no viscus but the kidney could be made out. The pelvic viscera were displaced downwards, agreeing with what had been previously determined. The left edge of the cyst in relation with the under surface of the diaphragm came about to the mid-line. The right half of the diaphragm seemed very high, and in its middle was a round hole through which the hand went easily into the right pleural cavity. Here the lung was compressed and pushed well over to the left side. The fingers could be passed upwards into the dome of the pleura behind the clavicle and could be felt from without. Around the opening in the diaphragm was some thickened tissue, particularly on the left side, suggesting the liver. A large number of pieces of a flabby, sodden membrane of a dirty greenish-brown colour and undoubtedly bile-stained which had been lying loose in the cavity were removed. After sponging out the cyst thoroughly the aorta and its bifurcation could be plainly seen behind the cyst wall. After washing out with boracic lotion a very long drain was inserted, which went up through the hole in the diaphragm, and another smaller one was passed into Douglas's pouch. The wound was dressed with cyanide gauze and absorbent wool. The progress was very satisfactory up to Sept. 4th except for occasional rises of temperature. On that day she had a rapid rise of temperature to 105·2° F., accompanied by a slight rigor. Accordingly she was thoroughly irrigated with hot boracic lotion, when a lot of foul-smelling discharge came away with some small cysts. The next day her temperature was lower, but there was slight redness with some œdema of the right leg and foot and enlargement of the inguinal glands. This all disappeared in a few days, and with frequent irrigation the temperature was kept low. On Oct. 8th, after being not so well for two or three days, she developed a parotid bubo. The tubes were removed from the wound, which was dressed with iodoform gauze. The bubo softened and was opened on the 18th, and after that date she had practically a normal temperature and no inconvenience except a little temporary diarrhœa. On Oct. 29th she was up for the first time, but for a long time she could only get on the couch, as in addition to her weakness there was considerable œdema of the right leg. On Jan. 19th she left the hospital for a convalescent home. Since this date she has remained quite well. Mr. Robinson considered that the cyst had started in the right lobe of the liver, which had been evidently extensively destroyed, and passing backwards and downwards had incorporated the hepatic area of the diaphragm behind involving the right pleural cavity, and below had passed downwards in front of the right kidney intraperitoneally, displacing the viscera backwards and to the left side.—Mr. SPENCER suggested that had an opening been made into the pleura the drainage would have been more perfect. He related the case of a girl aged twenty years who was supposed to have a pointing empyema of the left side. This, however, was found to be a large hydatid involving the pleura. The cyst was separated by the Australian method and the lung expanded at once. A second cyst was then found in the abdomen and a third in the right lobe of the liver. These were drained and the patient made a good recovery.

OBSTETRICAL SOCIETY OF LONDON.

Double Uterus with Double Hæmatometra and Complete Absence of the Vagina.—Primary Cancer of the Fallopian Tubes.—Exhibition of Specimens.

A MEETING of this society was held on Oct. 7th, Dr. F. H. CHAMPNEYS, President, being in the chair.

Dr. ARTHUR H. N. LEWERS read notes of a case of Double Uterus with Double Hæmatometra and Complete Absence of the Vagina. The patient was a girl aged seventeen years who had never menstruated. She was led to seek advice on account of severe pain in the hypogastric region and the lower part of the back. In November, 1893, careful examination under anæsthesia showed that the vagina was imperforate, and per rectum that there was a uterus, perhaps a little larger than normal in a virgin of seventeen years, but not much larger. There being no positive evidence of distension it was decided to watch the case. The patient was kept under observation for more than two years. Ultimately examination showed that the uterus was definitely enlarged, and it was then decided to operate. Full details of the operation, performed on Jan. 2nd, 1896, were given in the paper. There was complete absence of the vagina. There was a double uterus, each half of which was distended by retained menstrual fluid. The subsequent progress of the case was satisfactory. The patient was seen last September; she had menstruated regularly and was quite free from pain. The only difficulty was to keep the vagina open. It was found that the small ring pessary which she was wearing was, after being in for three months, to some extent incarcerated by granulation tissue, and an anæsthetic had to be given in order to remove it. It seems likely that by changing the pessary rather more frequently than usual, perhaps once a month instead of once in three months, this difficulty may be avoided in future. The question of a preliminary abdominal section in dealing with such cases was discussed in the paper, and though this operation was not performed in the present case it appeared to Dr. Lewers to be on the whole the right course to adopt.—The PRESIDENT doubted whether Dr. Lewers ought to give the name of hymen to the fold surrounding each of the depressions described. He was familiar with the appearance depicted and had himself figured something very like it in a case of extroversion of the bladder in a former volume of St. Bartholomew's Hospital Reports. These duct-like

openings he had also seen more than once in other deformities of the genital organs and in at least one case of vaginal transverse septum with double uterus above, but not continuous with it. He regarded them as the stranded distal extremities of Muller's ducts. With regard to the treatment of the ordinary retention of menses he did not follow the practice of Matthews Duncan; but he personally washed out the fluid once for all, believing that this was the safer course. With regard to the manufacture of a new vagina he had recently had a case in which the whole vagina except the actual fornices was absent. He dissected as Dr. Lewers had done and then stretched the skin to the fornices. The result had been good up to the present, but so far as he knew all the attempts to make a satisfactory canal merely by burrowing through cellular tissue and keeping it open with bougies had failed and he did not think a vagina could be satisfactorily made in this way.—Dr. AMAND ROUTH narrated the case of a girl twenty-one years of age who had painful menstrual molimina with amenorrhœa. He had treated his case as Dr. Lewers had done, but found great difficulty in keeping the vagina pervious. He did not think that there was any need to open the abdomen in order to decide whether hæmatosalpinx was present, that being discoverable by recto-abdominal palpation; but he believed that if the vagina could not be kept patent and menstruation without exit persisted the proper treatment was to remove the appendages so as to arrest the function altogether.—Dr. CULLINGWORTH said that he quite agreed with Dr. A. Routh in thinking that abdominal section might be a justifiable operation for other reasons than those alluded to by Dr. Lewers—in certain cases of menstrual retention in which the vagina or a large part of it was absent. As Dr. Lewers' case showed, and as was proved by the experience of everyone who had had similar cases to deal with, an artificial vagina was very difficult to keep open and the accumulation was apt to recur. Where this happened he thought it would be good practice to remove the ovaries with a view to the arrest of menstruation. He illustrated his remarks by a case in which fatal septicæmia had followed as the result of a rectal puncture. He believed that notwithstanding the introduction of antiseptics there was still danger in attempting to hasten the evacuation of the fluid by abdominal pressure or by washing out the cavity. From the nature of the fluid it was impossible for the evacuation to be completed at one sitting and therefore it was better to leave it to be gradually accomplished by the powers of nature. No fluid was more susceptible to the changes of decomposition than effused blood, and he personally always felt that his patient was safer when he had avoided all manipulations that involved the risk of introducing air or water or even chemical solutions into the retention sac.—Dr. HERMAN said that the probability of hæmatosalpinx with retained menses varied with the site of the atresia. When there was a septum low down in the vagina (the condition commonly spoken of as imperforate hymen) the blood was usually retained in the vagina without distension of the uterus, much less of the tube. But when the atresia was high up so that the uterus became distended hæmatosalpinx was more frequent. He agreed with the late Dr. Matthews Duncan that washing out after opening a cavity containing retained menses was bad practice. He had himself only lost one such case. In that patient the vagina was washed out without his instructions and against his wish and fatal peritonitis followed.—Dr. SPENCER thought that the case described was one of great interest and that the remarks made by the previous speakers were very instructive. He agreed with Dr. Herman that the difficulty and danger of the treatment of retention of menses depended chiefly upon the seat of the obstruction and also upon the presence or absence of hæmatosalpinx. In Dr. Lewers' case if the new vagina could be kept patent he had no doubt that the treatment adopted was the proper one. But if the passage closed it would, he thought, indicate abdominal section and the removal of the uterus and appendages as the proper treatment for these rare and difficult cases.—Mr. ALBAN DORAN dwelt upon the difficulties of determining the precise nature of a malformation of the uterus during an abdominal section. It was easy to make out uterus bicornis or hæmatometra or hæmatosalpinx by dissection, but an operator could not make such a dissection. He related a case illustrating this difficulty.—Dr. MACLEAN referred to two cases of retained menses which he had had an opportunity of observing. In the first, where the atresia existed in the lower half of the vagina only, treatment was easy and successful. In the other case the atresia was present from the hymen to the os uteri and the uterus was distended to the size of a fœtal head. Much difficulty was experienced in keeping the canal patent, and finally, after much local treatment, the abdomen was opened and the left ovary and tube removed, but it was found impossible to remove the whole of the right appendages. The result of this operation was unsatisfactory, and finally abdominal hysterectomy was performed with complete recovery of the patient.

Mr. ALBAN DORAN mentioned an unreported case of Primary Cancer of the Fallopian Tubes which occurred in the year 1847, at the same time reading some notes on Primary Tubal Cancer. In a MS. Atlas of Pathological Drawings recently presented to the library of the Royal College of Surgeons of England by Dr. Renaud of Manchester there is a drawing of a case of cancer of the tubes and ovaries, dated November, 1847. The uterus was free, it appears, from malignant disease, but the further history has been lost. The figure represents the disease as far advanced in one tube, whilst the ovaries remain small. This is the condition found in primary cancer of the tubes described within the last ten years. Mr. Doran noted a source of fallacy. The large tube may be a hydrosalpinx, into which cancer has extended from a relatively small ovary, as in the case of Winter and Fabricius. Orthmann has published a useful summary of cases of cancer of the tube related by the older writers of this century. Many observers, instead of analysing each case on its merits, seem to have worked with the fixed idea that cancer of the tube must always be secondary. Recent investigations tend to prove that primary cancer is more frequent in the tube than is commonly supposed.—Remarks were made by Dr. CULLINGWORTH and the PRESIDENT.

The following specimens were shown:—

Dr. TATE: A Tubo-ovarian Abscess.

Dr. W. R. POLLOCK: Fœtus Papyraceus.

LIVERPOOL MEDICAL INSTITUTION.

Lantern Demonstration of Normal and Pathological Radiographs.—Exostosis of Frontal Sinus.—On the Causation of Leprosy and the Extent of its Occurrence in Europe.

A MEETING of this society was held on Oct. 8th, Dr. RICHARD CATON, President, being in the chair.

Mr. THURSTAN HOLLAND gave a very interesting Lantern Demonstration of a series of Radiographs. First, he showed a large number of normal hands at different ages and called attention to the ossifying centres; this was followed by a similar series illustrating the Ossification of the Bones of the Feet. He also exhibited upon the screen a number of radiographs of fractures, then some of dislocations, and lastly a number indicating the presence of some metallic foreign body. Amongst the most interesting of these was that of a halfpenny in the trachea of a child. All the lantern-slides were of great excellence.

Mr. THELWALL THOMAS showed a patient from whom he had removed an Exostosis of the Left Frontal Sinus, a woman aged forty-six years, who ascribed the tumour to a blow received thirteen years previously. A small portion protruded into the orbit; this was of the size of a filbert. The patient suffered from severe frontal neuralgia. The tumour was removed by an incision placed well under the eyebrow; the orbital portion was seized by a strong forceps, and a few taps of the chisel loosened its attachment to the bone. While traction was kept up on the growth the floor of the sinus was cut away. The roof of the sinus consisted of dura mater. A large drainage-hole was made into the nose and a tube three-eighths of an inch in diameter was inserted and allowed to remain for ten days. The wound was not sutured, the cavity being lightly packed with cyanide gauze; it healed rapidly, leaving only a tiny cleft which could readily be closed. The growth, an ivory exostosis, grew from the inner wall of the sinus; it was bossed and mamillated, weighing a little over half an ounce.

Dr. KARL GROSSMANN read a paper which was based on the observation of cases of Leprosy in Iceland in 1895 and in Egypt in the early part of 1896, made primarily for the purpose of studying the ocular manifestations of leprosy. He said that leprosy was much more frequently met with

in Europe that was generally supposed and that many cases were overlooked in the early stages especially in the anæsthetic form. The most important question with regard to leprosy was whether it is due to contagion or heredity. The theory that it was due to fish-eating was not corroborated by any proof and must be given up unless some convincing evidence was brought to light. Equally uncorroborated was the hypothesis of an extra-human habitat of the virus of the disease. As to the question of heredity Iceland was peculiarly well adapted for deciding it, the people having careful records of their ancestry, often dating back 1000 years without a break. The evidence of the genealogy was strongly against the theory of heredity and a great number of facts told in favour of infection. The great amount of crowding and the extraordinary absence of cleanliness which prevails in many of the farms would tend to propagate any infection if it existed, and the people manifested an almost incredible indifference as regards the possibility of acquiring this loathsome disease from persons infected with it. Some remarkable illustrations of this were given. The object of the paper was to draw the attention of the medical profession in this country to the disease, to the possible occurrence when little expected, and to the necessity which existed of making provision for the proper and safe care of such cases when they arose. Cases that had actually occurred within a few weeks were quoted. The medical treatment of leprosy had hitherto been of no avail, as a careful scrutiny and observation of the reported cures tended to show. Until a successful treatment had been found isolation was the only known means of arresting the spread of the disease. Such an isolation need not be on the penitentiary lines.—Dr. STOPFORD TAYLOR said that in a non-leprous country like England the disease in an early stage might easily escape recognition, especially in the anæsthetic form. At the recent Dermatological Congress there was a wide divergence of opinion respecting one case as to whether it was anæsthetic leprosy or scleroderma. He called attention to the success of the injection of corrosive sublimate.—Professor BOYCE thought that Dr. Grossmann's statement that leprosy was on the increase would give rise to some surprise. Leprosy had decreased in England and in France and, he should have thought, generally in Europe. There was no doubt that more cases were recorded and tabulated owing to better facilities for observation.—Dr. GROSSMANN, in reply, said that the treatment by mercurial injections must be closely observed for a long period before its efficacy could be relied on, and that an increase of leprosy had been reported in Eastern Prussia and Russia. He also answered several questions that were raised in the course of the discussion.

NORTHUMBERLAND AND DURHAM MEDICAL SOCIETY.

Exhibition of Cases and Specimens.

THE annual meeting of this society was held in the Royal Infirmary, Newcastle-upon-Tyne, on Oct. 8th, Dr. J. DRUMMOND, President, being in the chair. Mr. Williamson was elected President for the coming session, after which the first general meeting was held.

Dr. W. ROBINSON showed a young woman who became suddenly Blind in her Left Eye. On ophthalmoscopic examination the signs of embolism of the arteria centralis retinæ were classical. She had mitral disease.

Dr. W. ROBINSON and Dr. J. MURPHY showed a man who had been Trephined for Depressed Fracture of the Skull. In December of last year a fall of stone had produced a compound depressed fracture of the anterior inferior angle of the left parietal bone and the contiguous part of the frontal bone in the temporal fossa. For four days he was unconscious and remained absolutely speechless till he came under Dr. Robinson's care in March (three months after the accident). His intelligence was apparently unimpaired, he had no paralysis, and his bodily condition was excellent. He had loss of volitional speech, loss of power to repeat words, agraphia, and inability to write to dictation, though he still retained the power of understanding spoken words, and could recognise the letters of the alphabet and copy them letter by letter. He also retained other powers of imitation, being able by gestures—"pantomime" speech—to indicate his meaning. Dr. Murphy trephined and removed the depressed bone in April. A tear in the dura mater was found, but there was neither laceration of the cortex nor a blood-clot. The bone was not replaced. Thirteen weeks after the operation he first spoke words—"dog," "nests," "birds," and "how do you do." Meanwhile he had been regularly taught. When brought before the society (nine months after the accident and six months after the operation) he read a short paragraph from a newspaper which he had not seen before and talked and answered questions slowly but intelligibly.

Mr. RICHARDSON showed a patient on whom he had performed Prostatectomy with success a fortnight previously.

Mr. RUTHERFORD MORISON exhibited two cases, the first of which had been operated upon, while the second was awaiting operation. They were brought forward to illustrate, first, the condition of patients before Pyloroplasty and after operation, and, secondly, the sort of case in which the operation was useful. Both patients had a history of long-standing stomachic trouble; pain, vomiting of sarcinous material, and progressive emaciation being the chief symptoms. The physical signs present were enormous dilatation of the stomach with visible peristaltic movements readily produced in it. In one a definite pyloric lump had been felt, in the other this was absent. The first patient had been operated upon three months ago. A stricture, so tight that it would not allow a small closed pair of hæmostatic forceps to pass through it without force, was found at the pylorus. The patient had gained two and a half stones in weight since the operation and was now able to eat and digest "as well as ever he was." Mr. Morison also showed a patient with a doubtful Ulcer of the Tongue.

Dr. OLIVER exhibited the stomach from a woman who was admitted to the infirmary moribund from Hæmatemesis. He also showed a woman twenty-eight years of age who suffered from puerperal septicæmia after her fifth child was born in March. She had now double wrist-drops and tingling in the forearms. He thought the case was one of Septicæmic Polyneuritis.

Dr. VICKERMAN RUTHERFORD showed a woman with Lupus of her Arm which had commenced only three months previously, and this he considered rare in a woman aged forty-eight years. He also showed a case of Palmar Psoriasis in a young woman dating from infancy.

Dr. HUME showed a woman with incurable Carcinoma of the Cæcum, which on the patient's admission to hospital was causing intestinal obstruction. An anastamosis between the ileum and the ascending colon was made. She had now a free daily evacuation of the bowels and her general condition was fair. He also showed a patient after Colectomy. On admission to the infirmary she had partial intestinal obstruction and a benign tumour was discovered in the splenic region. On opening the abdomen the splenic flexure of the colon was found to be involved in a malignant mass adherent to the stomach and tail of the pancreas. The adhesions were divided and the whole growth removed. The divided ends of the colon were closed and an anastomosis was made between the transverse colon and sigmoid flexure. Gauze packing and a large drainage-tube were used on account of oozing from the wounded pancreas. Pancreatic fluid escaped for some time and a small fæcal fistula formed, but eventually the wound healed, and the patient was now, as could be seen, in good health. The growth (exhibited) was a columnar-celled carcinoma surrounding the splenic flexure of the colon, the lumen of which was nearly occluded by it. In neither case were any plates, bobbins, or buttons used. A simple suture was, he believed, quite reliable.

Mr. ANGUS exhibited a man with a Suppurating and Disorganised Charcot's Joint.

SOCIETY FOR THE STUDY OF INEBRIETY.—The President and Council gave a reception on the 8th inst., in the rooms of the Medical Society of London, to Professor Gustav von Bunge of the Physiological Chemistry chair in the University of Basle. The resolution of welcome was proposed by the President, Dr. Norman Kerr, and seconded by Dr. George Harley. Professor Bunge, whose lecture on alcohol had been alluded to, congratulated Englishmen on having set an example to the Continent in the prevention and cure of that alcoholism which is the common foe of all European peoples. Dr. Wm. Huntly then read a paper on Opium, in the discussion of which Dr. Harley, Dr. Maxwell, Dr. Pringle, Mr. Gray, Mr. Aydon Smith, and the President, joined

Reviews and Notices of Books.

Kirkes' Handbook of Physiology. By W. D. HALLIBURTON, M.D. Lond., F.R.S., Professor of Physiology, King's College. Fourteenth Edition, with upwards of 600 Illustrations, including some coloured plates. London: John Murray. 1896. Pp. 851. Price 14*s*.

ALTHOUGH this work retains the title of Kirkes' Physiology, of which it is the fourteenth edition, it contains but little of those excellent lectures by Sir James Paget delivered in St. Bartholomew's Hospital in the late "forties," which are still remembered with pleasure by a few old students and of which the book in its original form was a free rendering. Under the hands of successive editors—Mr. Morrant Baker, Dr. Harris, and Mr. Baker, and, lastly, of Dr. Halliburton—it has undergone such radical changes in the arrangement and the language that it is difficult to recognise anything of the original. In fact, a comparison of the first with this last edition seems to mark the immense advances that physiology has made during the past half century. The nature of the animal cell, its mode of multiplication; the application of the graphic method for the representation of movement and for marking the passage of time; the structure and functions of the nerves and nerve centres; the circumstances influencing blood pressure and the means of determining the speed of the pulse wave and of the blood current; the various ferments formed by the pancreas; the structure and the functions of the kidney; the occurrence of inhibition elsewhere than in the case of the heart; the employment of the ophthalmoscope, perimeter, sphygmograph, plethysmograph, and other instruments of precision have practically altered the face of physiology, and have been so many steps towards rendering it an exact science.

Many of these advances have been recorded by the previous editors, but they have in the present edition been re-arranged and in great part re-written by a competent physiologist, so that it may now be regarded as one of the best of the numerous works of physiology that are at the command of the medical student. The general features of the original work have been judiciously retained, especially in regard to the sections on histology, for not only are the first seven chapters devoted to this subject, but a short account of the structures of each organ, such as the stomach, liver, and testis, precedes the consideration of its functions, and, as might be expected, the several sections give the results of the most recent and most trustworthy observations. The chemical part has, of course, been very thoroughly revised, and even when the facts are not quite new they have been arranged in a clear and—our readers will be glad to hear—intelligent fashion. The difficult subject of the cause of the coagulation of the blood is thus given: "When blood is within the vessels one of the constituents of the plasma, a proteid of the globulin class, called fibrinogen, exists in a soluble form. When the blood is shed the fibrinogen molecule is split into two parts; one part is a globulin, which remains in solution, the other is the insoluble material fibrin. This change is brought about by the activity of a special unorganised ferment called the fibrin ferment. This ferment does not exist in healthy blood contained in healthy bloodvessels, but is one of the products of the disintegration of the white corpuscles and blood tablets that occurs when the blood leaves the vessels or comes into contact with foreign matter. To this it may be added, as the result of recent research, that a soluble calcium salt is essential for the effective action of the ferment, that the fibrin ferment belongs to the class of nucleo-proteids, and that the other nucleo-proteids (Wooldridge's tissue fibrinogens) obtained from most of the cellular organs of the body produce intra-vascular clotting when injected into the circulation of the living animal. It has been suggested that fibrin ferment is the agent by means of which the calcium and fibrinogen are united to form fibrin."

By the adoption of a slightly larger page and of somewhat closer printing Dr. Halliburton has succeeded, without enlarging the volume, in compressing more material into his text, whilst he has added a large number of illustrations which greatly add to the value of the work. The book as now presented to the student may be regarded as a thoroughly reliable exposition of the present state of physiological knowledge.

The Pathology of the Contracted Granular Kidney and the Associated Cardio-Arterial Changes. By Sir GEORGE JOHNSON, M.D., F.R.C.P. Lond., F.R.S. Twenty-nine Illustrations. London: J. & A. Churchill. 1896. Pp. 62. Price 4*s*.

THE valuable work that the late Sir George Johnson carried out on the cardio-arterial changes in relation to kidney disease will probably be known to most of our readers, but in the first part of this treatise the author has described and illustrated more minutely than has hitherto been done the arterial changes in the granular kidney and throughout the system which are associated with the cardiac hypertrophy, and has given what he believes to be the true interpretation of the appearances. The controversy which ensued when these observations were first published is again discussed, more especially in regard to the views held by the late Sir William Gull and Dr. Sutton. Sir George Johnson lays particular stress on the fact that while the hypertrophy of the muscular coat occurs alike in all the tissues the thickening of the intima is found only in those of the kidneys; but, on the other hand, the hypertrophied arterioles in other tissues have their internal tunica adventitia hypertrophied to about the same extent as the overgrowth of the intima in the renal arterioles. He considers that the explanation of the relative excess of hypertrophy of the renal arterioles appears to be that during the progress of atrophic changes in the granular kidney many of the arterioles become atrophied and disappear. The result is that the work of regulating the undiminished blood-supply through the renal artery is thrown upon a small number of arterioles.

In the second part of the book a renewed attempt is made to show that the wasting of the granular kidney is the result of pathological changes which are primarily and essentially *intra-tubular*, and that the term "atrophic granular kidney" more truly indicates the nature of the renal disease than interstitial nephritis, since the author thought there was reason to believe that the pathological process is neither primarily interstitial nor of the nature of inflammation. He points out that the "nuclear bodies" which have been assumed to be an interstitial exudation are, in fact, the surviving nuclei of the intra-tubular epithelium. The result of repeated long and careful investigation has led him to the conclusion that the wide expanse of material between the tubes contains the wasted remains of the original tissues, tubular and vascular, apparently blended together by the colloid material which is contained in many of the tubes, and not a new interstitial formation. In other words, these irregular interspaces are the result and not the cause of the atrophy and contraction of the tubes. Although, perhaps, all observers will not be able to come to the same conclusions as Sir George Johnson, yet there is ample room for study in the deductions he lays down. The whole of his writings show an unusual amount of original thought, and none more so than this short work, the preface of which bears the date

May, 1896. Those who now read and study it will find every page full of interest and instruction, and will scarcely help repeating the well-known words, "He being dead yet speaketh."

Annals of Ophthalmology and Otology. Edited by CASEY S. WOOD, M.D., of Chicago, and others. Published quarterly by Jones H. Parker, Olive-street, St. Louis. Vol. V., No. 3. July, 1896. Pp. 454. Price per annum, $5.

THIS part contains no less than forty-nine articles, twenty-three of which are on ophthalmic subjects and the remainder on subjects connected with otology. The editors have adopted a useful method of giving abstracts of work done in England, America, France, Germany, and Spain. Dr. Charles Williams of Boston supplies an article on the Discrepancy between the Astigmatism as shown by Javal's Ophthalmometer and the Total Astigmatism by Trial Lenses, a discrepancy that must often have attracted attention. He finds that in 100 cases the axis and refraction were alike by Javal and trial glasses in 36 per cent.; the axis was alike but refraction different in 13 per cent.; the axis was different but the refraction alike in 18 per cent.; astigmatism was shown by Javal but no glass accepted in either eye in 13 per cent; the axis and the refraction were different in 7 per cent; astigmatism was shown by Javal but no glass accepted in one eye in 9 per cent.; lastly, in 4 per cent. no astigmatism was shown by Javal, but a cylindrical glass was accepted. Hence, whilst Javal's instrument constitutes in about half of all cases a reliable test, it is uncertain in the rest and should always be supplemented by careful testing with other methods. It is very useful as a ready means of recognising the presence of astigmatism, but is a fallacious guide in about half the number of cases that present themselves. Dr. Joseph E. Willetts of Pittsburg, Pennsylvania, describes a prismatic perimeter he has devised, which is interesting as demonstrating according to the author that there is no restriction of the normal field for any colour or any object. The instrument possesses special advantages since it enables the form and colour sense to be taken simultaneously, and the whole field can be taken in a few minutes, whilst the results are absolutely reliable. Dr. W. F. Southard of San Francisco has devised an apparatus to determine convergence and accommodation without prisms. It consists essentially of a screen with a vertical slit behind which two candles are placed, each of which is seen by one eye only and an effort is made by the patient to fuse them by convergence on the screen. The slit is then turned till it becomes horizontal and a similar effort is made to converge. It is claimed that there is a rapid gain in the power of the defective ocular muscles. Dr. F. C. Hotz contributes a lecture on Plastic Lid Surgery, in which he criticises and condemns the methods for the treatment of entropion in which the tension exerted upon the lid border is produced by shortening the integument between the lid border and the eyebrow. He maintains that to be effective the tension must have its fixed support in the lid itself. He proposes to make a horizontal incision from 4 mm. to 8 mm. distant from the margin of the lid and to separate the skin below this incision from the tarsal cartilage. The freed flap of skin can then be pulled up and exerts traction on the ciliary edge of the lid, raising and everting it, and being itself easily sutured to the upper border of the incision. In the otological section Dr. G. A. Wale of Topeka, Kansas, gives details of an interesting case of mastoid abscess complicated with lateral sinus, thrombosis, and diabetes, followed by an operation which led to recovery. Dr. T. Melville Hardie of Chicago discusses the questions of the anæsthetics, the instruments, and the operations to be employed in cases of adenoid vegetations, with special reference to operations under bromide of ethyl anæsthesia. The volume contains a chromo-lithograph illustrating a paper by Dr. H. V. Wurdemann of Milwaukee, Wisconsin, on Coloboma of the Optic Nerve and Retina, with Persistent Opaque Nerve Fibres. This number of the "Annals" is a good one, the abstracts being very full in addition to the numerous original articles.

Dictionary of National Biography. Edited by SIDNEY LEE. Vol. XLVIII. REILLY—ROBINS. London: Smith, Elder, and Co. 1896.

MR. COSMO MONKHOUSE supplies the biography of the only really eminent man (the Richards, Kings of England, and Roberts, Kings of Scotland, being omitted from our calculations) whose name is to be found in this volume. The exact position of Sir Joshua Reynolds in the hierarchy of painting will always be a matter of dispute. He was not the finest artist even of his time, and to faulty drawing in some of his pictures there was added the further defect that he used bad pigments which have not stood the test of time. But these things being considered, Sir Joshua Reynolds still remains in honest vigour of work and grandeur and nobility of conception the finest portrait painter that this nation has ever produced—imaginative, poetic, and faithful. It will be an interesting fact to our readers to learn that when quite a lad, and when he had already exhibited precocious ability with his pencil, he was given the choice of a profession by his father, a Plymouth schoolmaster, that choice lying between a painter and an apothecary. The future President of the Royal Academy, the painter, indeed, to whom the establishment of the Academy was chiefly due, deliberated, and then chose the calling of an apothecary, though circumstances afterwards allowed him to follow the bent of his genius.

This volume is singularly devoid of medical interest, there being only one name—that of Sir John Russell Reynolds—which is likely to be known to the majority of our readers. It is, therefore, surprising to find how small a space is allotted to Sir Russell Reynolds's career. We are aware that the space to which the author may extend his article when writing for an encyclopædia is a matter for editorial supervision entirely, but we may be permitted to wonder why the late President of the Royal College of Physicians of London was not considered of the same importance as many obscure persons. No member of our profession reading the notice of Sir Russell Reynolds's life will consider it an adequate one. That, however, is a small fault with regard to this unfortunate notice, at the foot of which we observe that THE LANCET is given as one of the authorities from which it has been written. We are unaware what facts have been selected from our biographical notice of Sir Russell Reynolds's life for publication in the National Dictionary of Biography, but we wish very emphatically to repudiate having anything to do with the insertion in the memoir, which we are now noticing, of the following sentence. It does not occur in our notice of the life of the late President of the Royal College of Physicians of London and should not have occurred in the notice in the National Dictionary of Biography. The words are as follows: "He ..... took a house, 38, Grosvenor-street, in which Dr. Marshall Hall (q.v.) had lived. Hall was exposed to just censure because he entered into an agreement, contrary to a recognised understanding among physicians, to transfer his patients to Reynolds. Reynolds, who was not then of the body of the College, was not involved in the censure which the President ..... pronounced upon Hall, and he was elected a Fellow of the College of Physicians in 1859." This passage appears to us to imply that Sir Russell Reynolds had bought Dr. Marshall Hall's practice, and that he would have been censured for this if he had been within the jurisdiction of the College. It is well, therefore, to state that the author of the memoir has-

been misled, that Sir Russell Reynolds purchased no practice from Dr. Marshall Hall, and that his conduct was never in question in the matter. Of course, he "was not then of the body of the College," for the excellent reason that he was only twenty-four years of age. Had he been a Licentiate only there would have been nothing in his conduct to censure, and his youth prevented him from being a Member or a Fellow. What makes the insertion of this passage the more extraordinary in the biography of Sir Russell Reynolds is that in that of Dr. Marshall Hall in this same National Dictionary of Biography no allusion is made to the episode. Knowing, as we do, that the biographer has in this instance been inaccurate we hope that the offensive passage will be deleted in future issues. The name of Dr. Walter Hayle Walshe in this memoir is spelled incorrectly, and the bibliographical information on the subject of Sir Russell Reynolds's literary work is incomplete and inaccurate.

JOURNALS AND REVIEWS.

The Veterinarian for September contains two very important papers, one by C. O. Jensen on Braxy, its Causation and Prevention, in which is described a specific infective disease common in Iceland, the Faröe Islands, Norway, Scotland, and Cornwall, which is caused by a bacillus (the bacillus gastromycosis ovis). This organism has been most carefully studied by Jensen and the cultural and microscopic characters are described and faithfully depicted in four beautiful figures which are reproduced by the Automatic Engraving Company. This article is well worth careful study. The second of these papers is an Investigation into the Nature, Cause, and Means of Preventing the Cornstalk Disease (Toxæmia Maidis) of Cattle, by Veranus A. Moore. Other interesting papers on the Roentgen Rays in Veterinary Practice and a series of clinical cases, editorial observations, the month's progress, science notes, and the reports of the meetings of the veterinary associations make up a most readable number. The October number contains a paper on the Influence of Heredity in Disease, by Professor Dewar, F.R.C.V.S.; a well-illustrated paper on Some Points in the Evolution of the Horse, by Rowland G. Saunders, M.R.C.V.S.; a continuation of Mr. Moore's paper on the Cornstalk Disease of Cattle, and the usual monthly register of literature and scientific observations, with reports of the veterinary societies.

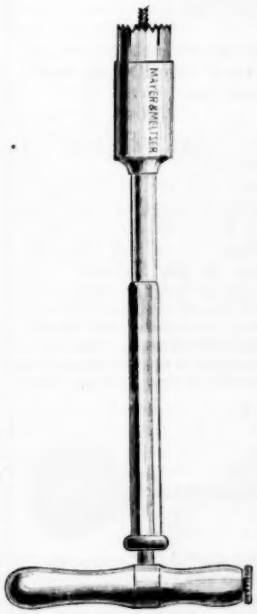
The Veterinary Journal and Annals of Comparative Pathology for September and October, 1896.—The earlier number contains a continuation of Mr. W. D. Simpson's Essay on Vivisection, an essay which may be read with profit by those who maintain that vivisection has done nothing for the alleviation of suffering amongst human and animal patients. In this article the anomalous position of the ordinary anti-vivisection enthusiast is distinctly brought out. Papers on Rheumatism, on the Conditions under which Bacteria Live, on Tuberculosis in the Horse, and on Meat Inspection are the most interesting; reports of the various veterinary societies, reviews, and correspondence complete this number. In the October number Sir Joseph Lister's Presidential Address at the British Association occupies the place of honour. Following this are notes on a case of Hernia through the Crural Arch, on Chloride of Barium, on Ulcerative Endocarditis following Influenza, on a case of Verminous Aneurysm of the Anterior Mesenteric in a Foal, on Perforation of the Thorax, and a number of most interesting papers delivered at the various veterinary associations.

In reading these journals month by month we cannot but notice the marked improvement in the character of the papers as compared with those published in the veterinary journals of even a few years back, for the *Journal of Comparative Pathology and Therapeutics*, the *Veterinary Journal*, and the *Veterinarian* of to-day are periodicals which in their way are equal to any similar series of journals selected from what may be spoken of as ephemeral literature. The editors of the veterinary journals are evidently of the opinion that their readers require good material, and in most cases they succeed in supplying these requirements.

New Inventions.

TREPHINE PERFORATOR.

THIS, I venture to think, is a much safer and at the same time a more efficient instrument than the ordinary obstetrical perforators in use in this country. It is a modification of the Perforatorium Rotatorium as used in France, but is easier of application and requires only one pair of hands to work it. All the cutting dilating perforators have seemed to me to be somewhat dangerous weapons to put into the hands of the inexperienced and may slip and injure the soft parts of the mother even when used by adepts. Moreover, the valvular opening which they make is often closed by pressure on the skull, thus the opening they make is ineffectual, and I have found it difficult to wash out the brain through the opening they make. With the clear-cut hole which the trephine perforator makes I find it much easier to evacuate the skull completely by a douche, and to thoroughly clear away all débris from the vagina before bringing down the head. The instrument is made by Messrs. Mayer and Meltzer of Great Portland-street and takes to pieces in such a manner that it can easily be kept aseptic.

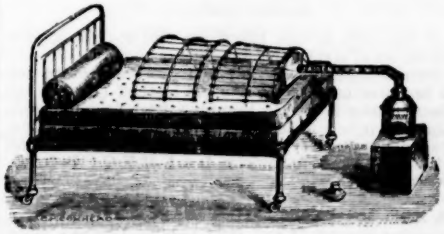


EDWARD H. DOUTY.

Cambridge.

PORTABLE TURKISH HOT-AIR AND VAPOUR BATH.

MESSRS. J. ALLEN AND SON of Marylebone-lane have introduced a Turkish Hot-Air and Vapour Bath, portable, simple, and moderate in price. It is of tin and of



superior manufacture, easily manipulated, and capable of giving a bath of from 120° to 180° F. in a very few minutes

at a minimum cost. They also manufacture a Domestic Hot-Air and Vapour or Medicated Bath, which with the

entire apparatus and spirit necessary will pack in a box 1 ft. square, weighing only 12 lb. These inventions are worthy of the notice of the medical profession.

A NEW SYRINGE FOR TROUBLESOME CASES OF GONORRHŒA.

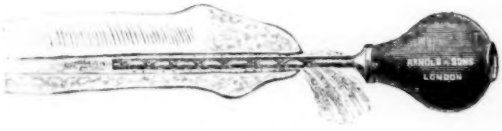
A SYRINGE which I have had made for me by Messrs. Arnold and Sons consists of a reservoir with a capacity of two ounces and a pipe five inches in length, the size of a No. 9 catheter, with a bore of one-eighth of an inch channeled on the exterior for the return of the injection. The advantages I claim for this syringe are that its length allows of its being passed beyond the site of the disease in the urethra, and then, by compressing the rubber reservoir, the urethra is well sluiced out from behind forwards; there is no forcing of the injection into the urethra or compression of the glands, as is necessary with the ordinary glass syringe; there

FIG. 1.

Gonorrhœal matter pushed further into the urethra by means of the imperforate bulb.

is no danger of pushing the gonorrhœal matter further down the urethra and leaving it there, as with other syringes furnished with imperforate bulbs; the channels on the tube

FIG. 2.



Section of penis.

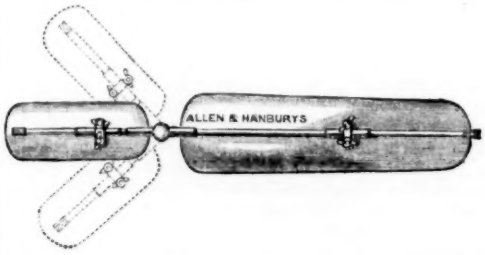
allow of free exit to the injection; and the size of the reservoir allows of a substantial douche.

The above diagrams illustrate the great advantage my syringe has over others. In the old method (Fig. 1) the gonorrhœal matter is pushed towards a fresh field for infection, while the injected fluid flies in the opposite direction. In my simple syringe (Fig. 2) the injected fluid sweeps all before it. RALPH STONEY, L. & L.M.K.Q.C.P. Irel.

Gloucester Terrace, S.W.

A NEW UNIVERSAL ADJUSTABLE SPLINT.

THIS splint consists of two steel rods meeting at a joint, which can be rigidly set by a simple arrangement at any angle required. To each rod is affixed a plate to be bandaged to the limb. These plates will also turn around an axis in the plane of their length. The splint can be applied to any aspect of the limb, and hand pieces are also supplied. It will be seen that the splint can be used for most of the fractures of the bones of the extremities, and for diseases and excisions of several of the joints. We think it will be found



to be of value, especially in country practice, on account of its adaptability to a great variety of conditions. The plates may be made of metal, wood, or poroplastic. In the specimen submitted to us aluminium was the metal used, this having the advantage of being very light and of not interfering with the Roentgen's rays when skiagraphs are employed to show the positions of the ends of the broken bone. Messrs. Allen and Hanburys, of Wigmore-street, W., are the English manufacturers.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A QUARTERLY meeting of the Council was held on Oct. 8th. Owing to the absence of the President, Sir William MacCormac, through indisposition, Mr. N. C. Macnamara, the senior Vice-President, took the chair.

The Secretary reported the death of Sir John Eric Erichsen and it was resolved: "That the Council hereby express their deep regret at the death of Sir John Eric Erichsen, Bart., F.R.S., past President of the College; that the Council do also record their grateful remembrance of Sir John Erichsen's many services to the College while a member of the Council and their keen appreciation of his valuable work in the advancement of surgical skill and knowledge."

The Secretary also reported the death of Sir George Murray Humphry and it was resolved: "That the Council desire to express their deep regret at the death of Sir George Humphry and their sincere sympathy with Lady Humphry and the members of his family. That the Council deplore the loss to the College of a Fellow distinguished, not only for his skill as a surgeon, but for his untiring efforts in facilitating the study and advancing the science of surgery."

The Council was informed that the alterations in the theatre were being carried out.

The Council proceeded to the consideration of the draft report to be presented to the Fellows and Members at the meeting to be held on Nov. 19th next. The report was approved and adopted.

The Jenks Scholarship was awarded to Mr. A. Whitehead-Smith, formerly a student of Epsom College.

The Chairman reported that on the invitation of the council of the Royal Academy the President, the Junior Vice-President, and the Secretary had attended the funeral of the late Sir John Everett Millais, Bart., President of the Royal Academy, at St. Paul's Cathedral, on Aug. 20th, 1896.

INSANITARY DWELLINGS AT GOSPORT.—At the meeting of the Gosport urban council on the 8th inst. a memorial signed by 500 people was presented asking the council, "in consequence of the scarcity of houses or cottages, high rents, and bad condition of many of the dwellings in the district suitable for the working classes," to adopt the Housing of the Working Classes Act, 1890. This, it is urged, would prevent overcrowding and the excessive rents at present complained of, and would cause the unhealthy and uninhabitable dwellings to be put into good repair or removed. The matter is receiving consideration.

THOMAS WAKLEY,

THE FOUNDER OF "THE LANCET."

A BIOGRAPHY.[1]

CHAPTER XL.

The Case of the Uxbridge Fish-hawker.—Indignation of the Magistrates.—The Appointment of a Parliamentary Committee.—The Evidence of Witnesses.—The Findings of the Committee. — Wakley's Prolonged Struggle with the Magistrates.—The "Ingoldsby Legends" and Wakley.—Wakley's Composite District.—Three Specimen Medical Inquests.—The Hounslow Flogging Case.

THIS triumphant issue of Wakley's first serious encounter with the magistrates of Middlesex did not at once establish amicable relations between him and that body. Almost immediately an attempt was made to discredit his authority and judgment by an indignant criticism of certain proceedings which had occurred at one of his inquests, strong expressions of censure being made use of regarding his conduct which should never have been employed by the magistrates who held a commission to administer the law and should have remembered that Wakley's position in the public eye was more important than their own even when considered legally. The inquest itself was not especially interesting either from a medical or a forensic point of view. A fish-hawker of Uxbridge had been stabbed in the abdomen by a lad aged fifteen years under circumstances which led to a verdict from the coroner's jury of "Wilful murder." Wakley instructed the constable in charge of the case to take the lad direct to Newgate upon a warrant made out by himself. The case had been previously before the Middlesex magistrates, who had adjourned their inquiry until the completion of the coroner's inquest. The result of Wakley's action was that when the magistrates again met there was no prisoner before them. They were excessively annoyed at being placed in a position in which they conceived that Wakley had exceeded his powers at the expense of their dignity. They rebuked the constable for carrying out Wakley's orders and gave an impetuous freedom to their speech in registering their opinions of the coroner's behaviour in taking an important duty out of their hands. They conceived that Wakley had committed the boy solely out of an idea that by so doing he would make them look ridiculous. It was as much as to say, "You excellent gentlemen can deliberate over the boy's case if you like, but any opinion you arrive at will be only interesting to yourselves and not of any practical value to the public, for I have committed him to Newgate, whence he will appear before your superiors." As a matter of fact Wakley had been actuated by no such stupid and vulgar motives, but only by what he conceived to be prudence and a regard for the public time. A similar case had occurred in a neighbouring jurisdiction and Wakley, feeling that his brother coroner had been right on that occasion, followed the precedent. The magistrates, however, believed that they were a deeply insulted body, and a movement was set on foot for the appointment of a Select Committee of the House of Commons to inquire into the whole question of the Middlesex coronerships. Other factors soon took their part in keeping the movement going. The vicar of Hendon, in the suddenly assumed character of an energetic magistrate, had not forgotten the official snub that he had received as the result of interfering with the exhumation of the body of Thomas Austin, and was glad to learn that a further opportunity would be given to discuss that case before a new tribunal. The magistrates as a body had another grievance against Wakley. During the winter he had held an unusually large number of inquests by deputy, and they were uneasy as to the legality of his action in so doing. Three sets of charges were thus formulated against Wakley:—(1) that he had overstepped the jurisdiction of his office in his attitude towards the magistrates by committing the Uxbridge prisoner to Newgate; (2) that he had held unnecessary inquests, notably in the case of the Hendon pauper; and (3) that he had allowed an unusually large number of inquiries to be conducted by deputy. On these grounds the appointment of a Parliamentary Committee was sought. Wakley, true to his previously expressed desire that his public duties should always be subject to the scrutiny of the public, so far from offering any opposition to its appointment, spoke in its favour, and on March 17th, 1840, certain Members of Parliament were commissioned to report upon the whole matter, their reference being "to inquire into any measures which have been adopted for carrying into effect in the county of Middlesex the provisions of the Act I. Victoria, c. 68, and also into any proceedings of the Justices of the Peace in relation to the office of coroner in the said county." The Committee consisted of fifteen persons, their names being: Lord Teignmouth (chairman), Colonel Thomas Wood, Mr. William Williams, Mr. Mackinnon, the Solicitor-General for Ireland, Mr. Cripps, Mr. Thomas Duncombe, Sir James Duke, Lord Eliot, Mr. Aglionby, Sir Thomas Freemantle, Sir Benjamin Hall, Mr. Gally Knight, Sir George Strickland, and Wakley himself. Of these, five were to form a quorum.

After a preliminary discussion upon their mode of proceeding the first meeting for hearing evidence was held on May 29th, 1840, Lord Teignmouth being in the chair, and the first witness called was Mr. William Baker, who for nine years and eight months had been the coroner for the eastern division of the county. Mr. Baker, in the course of his evidence, expressed his opinion that the scale of payment to witnesses both medical and others under the Act was fair, but thought there should be some fee to the jurymen. On the question of deputy coroners he said that Wakley's predecessor frequently held inquests by deputy, as also did his own predecessor, Mr. Unwin, although he had never done duty by deputy himself. This evidence was very valuable to Wakley, as showing that the qualms of conscience which had overtaken the Middlesex magistrates in the matter of deputy coroners were of recent origin, being, in fact, contemporaneous with his election to office. Mr. C. Wright, clerk to the committees of the Middlesex magistrates, was examined next particularly on the question of the holding of too frequent inquests. He stated that forty-eight inquests had been held in the county, the expenses of which were disallowed by the magistrates. Of these, thirty were in Wakley's district, and subsequently the expenses in forty-seven of the cases were allowed, only one being refused. The deputy clerk was examined next upon the incidental expenses of the two coronerships of Middlesex, using the figures which had already been prepared for the Middlesex magistrates. He deposed that between Aug. 14th and Sept. 14th, 1839, forty-seven inquests were held by Wakley, who paid out of pocket £49 9*s.* 6*d.*—i.e., a fraction over £1 for each inquest. During the same period Mr. Baker held thirty-nine inquests and paid expenses out of pocket £60 1*s.*—i.e., a fraction over £1 10*s.* for each inquest. Mr. Thomas Bell, clerk to Wakley, deposed that he was for fifteen

[1] Chapters I., II., III., IV., V., VI., VII., VIII., IX., X., XI., XII., XIII., XIV., XV., XVI., XVII., XVIII., XIX., XX., XXI., XXII., XXIII., XXIV., XXV., XXVI., XXVII., XXVIII., XXIX., XXX., XXXI., XXXII., XXXIII., XXXIV., XXXV., XXXVI., XXXVII., XXXVIII., and XXXIX. were published in THE LANCET, Jan. 4th, 11th, 18th, and 25th, Feb. 1st, 8th, 15th, 22nd, and 29th, March 7th, 14th, 21st, and 28th, April 4th, 11th, 18th, and 25th, May 2nd, 16th, 23rd, and 30th, June 6th, 13th, 20th, and 27th, July 4th, 11th, 18th, and 25th, Aug. 1st, 8th, 15th, 22nd, and 29th, Sept. 12th, 19th, and 26th, Oct. 3rd, and 10th respectively.

years clerk to Wakley's predecessor, Mr. Stirling, during which time the accounts were made up in the same way as they were at present. In Mr. Stirling's case there had been no obstacle or objection to the payment of such accounts, although there had been several since Wakley's appointment to the office. Mr. Bell had never heard any objection being made by magistrates to the employment of deputy coroners till Wakley was appointed to the office. Sir Peter Lawrie, one of the Middlesex magistrates, was examined next, and from him it was elicited that one of the magistrates who greatly objected to the payment of the present coroner's accounts was the Rev. Theodore Williams, vicar of Hendon. Sir Peter Lawrie said that his attention had never been drawn either to the coroner's accounts or the practice of holding inquests by deputy before Wakley's appointment; and he also added that previously to the fracas arising out of the disinterment of the body of Thomas Austin the vicar of Hendon had not as a justice of the peace given any special attendance to the county finances, but that on the morning of the next quarter sessions he had told Sir Peter Lawrie he was "going to attend for the express purpose of objecting to the coroner's accounts." On June 30th Wakley's own examination commenced, for in the proceedings of this Parliamentary Committee to inquire into his own behaviour he occupied the Gilbertian position of criminal as well as judge. His examination turned chiefly on the alleged want of accord between the local justices and the coroner. He was questioned closely upon the case where he had himself made out a warrant for the committal of a prisoner to Newgate on the charge of murder. The constable, Wakley admitted, said that he had been directed to take the prisoner back to Uxbridge, so that he might go before the magistrates but he (Wakley) insisted on his being at once removed to Newgate, a coroner's verdict *in esse* being of more importance in his eyes than a magisterial decision *in posse*. Subsequently the magistrates met to investigate the case, and he knew that there was no prisoner forthcoming. But he learned also that his proceedings were made the subject of severe censure, and that the unfortunate constable, who only acted under his orders, was also severely rebuked. With regard to the Hendon case Wakley related the whole story over again, pointing out that it was his undoubted duty to hold the inquest, and that he was therefore compelled to ask the vicar and churchwardens of Hendon to disinter the body. They had refused to pay any attention to his warrant, and he had consequently been compelled to hire labourers to perform the task. Wakley was followed by Mr. Serjeant Adams, who was examined on July 3rd, with respect to the same case. He remembered a complaint being made at the Quarter Sessions held the previous October of indelicacy on the part of the coroner for the Western Division of the county in having the body of the pauper raised and exhibited to view whilst the vicar was performing the funeral service over another body in the churchyard—"but no one doubted Mr. Wakley's right to disinter the body." Much of the learned serjeant's evidence was in the form of a discussion as to whether the phrase "duly held" as applied to an inquest, signified that the inquest had been necessary, but he was unable to help the Committee to any definite conclusions.

The Committee reported on July 27th, 1840, and agreed to eleven resolutions, of which the 7th, 8th, and 9th had reference to Wakley personally, viz.:—

7. That the magistrates in disallowing the fees for inquests held by deputy acted in conformity to the law, but that Mr. Wakley, in appointing a deputy during his temporary illness, followed the practice of his predecessors, and that by 6 and 7 Will. IV., c. 105, coroners in case of illness or unavoidable absence are empowered to appoint deputies.

8. That with reference to an inquest held at Hayes the proceedings of the magistrates in committing an individual to Newgate on a charge of manslaughter after the jury had found a verdict of wilful murder were strictly legal. [This was the case upon which Wakley had relied as a precedent for his conduct in the matter of the Uxbridge lad, but the committee did not take the same view. They considered that at any rate the magistrates were within their rights in committing the prisoner in what terms they pleased and in disregarding the coroner's jury.]

9. That in reference to another inquest, the coroner having committed an individual to Newgate, and it being alleged that the magistrates had censured the coroner and rebuked the constable, the Committee having no distinct proof of the terms or form of such censure abstain from expressing any opinion thereon.

The tenth resolution was to the effect that any interference of individual magistrates had been overruled by the general court, and that the magistrates as a body showed a disposition to uphold the authority of coroners.

The result of the Parliamentary Committee was satisfactory to Wakley, but not quite so satisfactory to Mr. Baker. Mr Baker was an admirable coroner, as good a living argument for the legal judge as Wakley was for the medical. The magistrates designed to do him honour at the expense of his colleague by inquiring into the conduct of the coronerships, and they succeeded in effecting the reverse. That he did not appreciate their attentions may be read in the following passage from his book on Coroners' Law, which was published in 1851, and remained as long as the law continued unaltered the best text-book on the subject.

"Considering the useful and important functions which justices of the peace and coroners are reciprocally called upon to perform in penitentiaries, gaols, unions, workhouses, lunatic asylums, and other places," he writes, "it seems quite clear that such public officers should stand with regard to the exercise of their duties in a perfect state of independence relative to one another, more especially as by the Poor-law Act all justices of the district in which a union is established are ex-officio guardians of the poor; and that in calling into action the judicial functions of the coroner that officer ought not to be fettered by the apprehension of a personal or vexatious exercise of authority by individuals on whose conduct he may be called upon to adjudicate. ..... It is much to be regretted that a disposition on the part of the magistrates of some counties prevails to exercise too rigid an economy with regard to the payment of fees and expenses of inquests out of the county rates; and by laying impediments in the way of the coroner, and imposing restrictions upon him which the law never contemplated, they indirectly attack the efficiency of the office."[2]

From this time forward, although the relations between himself and the Middlesex magistrates remained strained, no more trouble was experienced by Wakley about his conduct of inquests. He had proved to the public, to the magistrates, and to the House of Commons that none of the charges against him would bear even the flimsiest investigation; while he had demonstrated in addition to the magistrates a fact that other opponents had found out before—viz., that he was an awkward man to attempt to confine or coerce. He was quite ready to meet the views of persons able to express them in a reasonable manner, but he was not to be browbeaten. Moreover, he was an old hand at a newspaper war and entered into the spirit of it, so that the unfair and even libellous criticisms upon him instead of making him amenable only made him more determined to conduct matters in his own way. For several years the

[2] A Practical Compendium of the Recent Statute Cases and Decisions Affecting the Office of Coroner. By William Baker, one of the Coroners for Middlesex.

Middlesex magistrates put him to great trouble concerning his fees, which does not appear as a very dignified or worthy attempt at reprisal on his part. His disbursements were often very heavy in the aggregate, even though the individual inquests were economically conducted, for his district was so enormous. The county consequently would frequently owe him large sums of money, which it would have been exceedingly agreeable to him, living in the irregular style that has been mentioned, to obtain quickly, but which he never could extract from them without delays and formalities which, under the circumstances, were almost impertinent. The chief items in his claims against the county were for "mileage"—that is, for money allowed to the coroner for expenses and calculated at so much a mile, a shilling being the usual figure, from his residence to the place of the inquest. The magistrates complained that by taking up his abode at Harefield Park, on the extreme confine of his district, he had made the mileage expenses as heavy as possible. Now, to begin with, this contention was beside the point. Having no legal force it could only have been employed vexatiously. There was no dispute that Harefield Park was within the district, and as the law said nothing of any necessity that the coroner should live in the centre of his district the objections to payment of Wakley's claims were quite untenable. Wakley's reply, however, took no legal grounds. He simply said, firstly, that he had resided at Harefield some years before he was elected coroner, and, secondly, that in a district so large if he lived in the centre of it he would almost invariably have a long way to drive to each inquest, whereas by residing, as he did, half at Harefield-park and half at Bedford-square, he gave the county a double chance that he would be near the scene of action. In calling attention to the fact that his claim for mileage must of necessity be high because of the number of inquests that it was his duty to hold, he was always able to refer to the admittedly arduous nature of his work, so arduous that the magistrates themselves had petitioned the Lord Chancellor to appoint two people to do it. After a time this bickering over accounts ceased, and the magistrates were content to put up with a man who would not acknowledge their authority, yet whose duties towards the county which they and he served were always rigidly, and even enthusiastically, discharged.

But although peace was ultimately made Wakley never forgave the bench for their bitter and sustained opposition to him at the beginning of his official relations with them. He resented the attempts to personally humiliate him, which were marked, and openly declared that their original design had been to drive him from the coronership. But more than his personal grievances he deplored the publicity that his quarrels with the magistrates received, because of the harm that he feared might thus be done to the future chances of medical men becoming coroners. He thought that the relations between himself and the Middlesex magistrates might be taken by the people as typical of those that would result from the choice of medical men, whereas the opposition to him had been in the first instance wholly political and unconnected with his profession.

Whether future elections of medical coroners were endangered or not there are no means of judging, but certainly these two years of quarrelling earned Wakley an unfair public reputation as a difficult man. His high opinion of the dignity and utility of his office which led him to assume an antagonistic demeanour towards all who attempted to lower the one or lessen the other were very generally treated by the press as manifestations of fussiness, until time proved Wakley right in his views, and a much suaver man than his early actions promised. The following lines from the "Ingoldsby Legends" reflect the erroneous estimate of him very distinctly, and probably were written with the identical Uxbridge case as a text, although they did not appear till some years later—not indeed until public opinion of Wakley as a coroner had completely veered round.

> "They sent for the May'r and the Doctor, a pair
> Of grave men, who began to discuss the affair,
> When in bounced the Coroner, foaming with fury,
> 'Because,' as he said, 'twas pooh-pooh'ing his jury.'
>
> "Then commenced a dispute, and so hot they went to't,
> That things seemed to threaten a serious *émeute*,
> When, just in the midst of the uproar and racket,
> Who should walk in but St. Thomas à Becket.
>
> "Quoth his saintship, 'How now? Here's a fine coil, I trow!
> I should like to know, gentlemen, what's all this row?
> Mr. Wickliffe—or Wackliffe—whatever your name is—
> And you, Mr. May'r, don't you know, sirs, what shame is?'"[3]

The records in the coroner's court of such a jurisdiction as that over which Wakley held sway would in themselves make a large and exciting volume. His inquests averaged fifteen per week, and the cases which came before him presented a variety that must have been almost peculiar to his district. A large metropolitan area supplied catastrophes of all the usual and unusual urban varieties, and questions of the inability of employers, the adequacy of hospital administration, the management of reformatories, and the sanitation of house property among others were offered to well-selected juries for their consideration. A large country area, on the other hand, brought its tale of rural woe. There were spots on the Hertfordshire and Buckinghamshire borders whose primeval ignorance and deep poverty seemed incredible, recalling that the inhabitants were within a day's walk of the largest city in the world. Here the death of the miserably paid, underfed labourer in his dirty hut, of the wayside tramp in the ditch, of the gamekeeper and the poacher, provoked investigation into the Corn Laws, the Poor-law Amendment Act, and the Game Laws; while occasionally some bucolic crime, terrible with the blind savagery of the primitive man, would come before a jury so primitive themselves that the particular note of horror would fall upon deaf ears. On one occasion it was found that the jury who had been summoned to an inquest to be held in a hamlet near Harrow had divided among themselves the raiment of the body, contributing their rejected rags to protect it from nakedness!

Many of the inquests held by Wakley were reported in THE LANCET, but only when there was a strong medical interest attached to some of the evidence. Wakley was before all things a medical coroner, and firmly convinced that a good coroner without medical knowledge could not be. Whenever he had a case before him where his scientific knowledge came into play he gave that case full publicity, that it might form an argument for the future election of medical coroners. The early reports were written by George Ireland Mills, a member of a family whose fortunes were closely bound up with Wakley. The head of this family was a member of the firm of Mills and Jowett, the printers of THE LANCET; Jowett, by the way, being the father of the celebrated Master of Balliol. Mr. Mills had four sons: Samuel, the eldest, was printer of THE LANCET, being a member of his father's firm; George Ireland Mills, the second, was Wakley's private secretary; Rev. James Basnett Mills, the third, was for eleven years tutor to Wakley's eldest son; and Alexander, the fourth, was publisher of THE LANCET.

Many of the cases reported for Wakley by George Ireland Mills are also to be found in the *Annual Register*, a publication which has always given a generous proportion of its space to the chronicles of horror and crime, and among them a few cases may be mentioned which in particular during the first seven years of Wakley's coronership drew attention to the utility that a medical coroner might be to the community. A deaf lad who had gone to a certain Dr. Turnbull of Russell-square, who enjoyed a considerable

[3] "The Brothers of Birchington, a Lay of St. Thomas à Becket." The Ingoldsby Legends. Third Series. 1847

reputation as an oculist and aurist about the beginning of the present reign, died in the medical man's consulting-room during an operation. The evidence showed that the deceased had received from Dr. Turnbull or his assistant some sort of bellows, with directions how to use them. He died whilst forcing air up his nose. Turnbull was an able, inventive man and properly qualified, but his methods were reprehensible. He boldly held out hopes of cure to the incurable, magnified small mishaps into constitutional conditions requiring his exceptional skill for their remedy, was heroic in the application of treatment, and, generally speaking, played a part towards the public which a self-respecting practitioner would not have done. His practice was so enormous that on more than one occasion his neighbours in the quiet and select square had complained to the police of the obstruction to the traffic on the pavement caused by Turnbull's gratuitous patients assembling without his house at certain hours, and once at least this fortunate man had to appear in a police-court to be fined for his popularity. The irregularities in Turnbull's methods despite this great public favour were well known to Wakley, who saw in the death of the lad the possible result. It chanced also that a fatality had occurred but a few days before in Mr. Baker's jurisdiction, sudden death having followed the use of these same bellows for deafness. Wakley, therefore, ordered a post-mortem examination to be made, when certain appearances were described to the jury which Mr. Savage, the lecturer on anatomy at Westminster Hospital, attributed to the injection of cold air into the Eustachian tubes, while Liston, the great surgeon, ascribed the boy's death to shock following on the same treatment, although he was not so positive in his evidence that the physical signs discovered post mortem had the significance that Mr. Savage saw in them. Wakley expounded this evidence to the jury, with the result that Turnbull was cautioned, by a rider to the verdict, never again to trust his instrument in unprofessional hands. Another case which caused much popular sensation was that of a cabman who had been plied with raw spirits by one of his fares with a view of ascertaining how much alcohol the poor wretch could carry. The cabman collapsed and died, and Wakley had considerable difficulty in persuading the jury that the cause of death had been the imbibition of spirits, for they one and all refused to believe that raw spirit of potable description was a virulent and rapid poison if taken in sufficiently large doses. Wakley's little lecture on physiology enlightened the public. Another case which occurred in Wakley's district was remarkable, first, by its medical bearings, and secondly because of the extraordinary coincidence that it formed. A well-known member of the bar, a sergeant-at-law and leader on the Midland Circuit, was found in his study deluged with blood, the belief of those who found him being that he had cut his throat. No medical evidence being offered, Wakley ordered an adjournment to allow of a post-mortem examination being made, when it was discovered that the hæmorrhage had proceeded from the lungs, and not from any external wound self-inflicted or other. The coincidence lay in the fact that several years before the case occurred Wakley had given as an example of the necessity for medical knowledge in the coroner the suppositious instance of a death from pulmonary hæmorrhage being mistaken for cut-throat. He pointed out that many people believed it to be wrong, dangerous, and impedimental to the course of the law to touch a corpse until after the inquest; that, consequently, such a case unless medical evidence was provided might be reported to the jury as a suicide upon unchallenged testimony and a verdict obtained in accordance. The suppositious case as put by Wakley was considered exceedingly far-fetched, so that it was extraordinary that a very similar one should have occurred in real life in his own experience within a few years.

The publication of these and other cases served to impress on the public mind the feeling that with a medical coroner the inquest was a safeguard that it never could be where the coroner was a lawyer. And that some such general impression was created is shown by the extraordinary outburst of public sympathy that greeted the action of the coroner of West Middlesex in the most sensational inquiry that it was ever his duty to hold. When in June, 1846, in accordance with Wakley's direction, a jury found that Private White, of the 7th Hussars, had died from the effects of a flogging administered according to the ordinary regulations then existing in the army, the anger of many worthy and influential people as well as of military martinets would have seriously jeopardised Wakley's position as coroner had it not been for the strong public credit which he enjoyed by that time as a fair judge, a shrewd man, and a logical interpreter of medical evidence. There was judgment as well as humanity behind the endorsement that Wakley's conduct then received, and the popular confidence which he enjoyed enabled him to carry through a bitter struggle with constituted authority before which a weaker man or a man less reinforced by public opinion would have almost certainly succumbed. A righteous cause has strength, but the solid front of a great public department does not collapse before mere righteousness. The story of the Hounslow inquest, which will follow in the next chapter, is one of the most stirring episodes in the whole of Wakley's eventful life.

(To be continued.)

DIPHTHERIA IN LONDON.—There was a sensible decrease in the registered mortality from diphtheria last week in the metropolis as compared with the number of registered deaths from the disease in the week immediately preceding. The deaths for the weeks ended Sept. 19th and 26th had been 49 and 61 respectively, and in the next week rose to 69. Last week the number fell to 52, a total 9 in excess of the corrected decennial average for the forty-first week of the period 1886–95. Only one of the 52 deaths occurred in a person aged over twenty years. Six of the fatal cases belonged to Lewisham, 5 to Camberwell, and 4 each are credited to Lambeth and Greenwich, 3 each belonging to Shoreditch and Poplar sanitary areas. The admissions to hospital during the week numbered 112, as against 103, 101, and 98 in the preceding three weeks, and the number of patients remaining under treatment on Saturday last was 798, or just 100 in excess of that of six weeks previously. In the outer ring of the metropolis there were 9 deaths registered in the week, making 61 for London and suburbs. Four deaths occurred in the West Ham district.

FOREIGN UNIVERSITY INTELLIGENCE.—*Berlin:* Dr. E. Wernicke, *privat-docent* in Hygiene, has been granted the title of professor. Dr. R. Krause has been recognised as *privat-docent* in Anatomy.—*Bologna:* Dr. Gurrieri has been recognised as *privat-docent* in Forensic Medicine.—*Breslau:* Dr. H. Stuhr has been appointed assistant in the Anatomical Institute in succession to Dr. Endres. Dr. Kionka has been recognised as *privat-docent* in Pharmacology and Toxicology.—*Budapest:* Dr. E. Baumgarten has been recognised as *privat-docent* in Laryngology, and Dr. G. Hainiss as *privat-docent* in the Theory and Practice of Vaccination.—*Buffalo:* Dr. Czego has been appointed Professor of Nervous Diseases.—*Cincinnati (Ohio Medical College):* Dr. Wolfstein has been appointed Lecturer in Pathological Anatomy.—*Erlangen:* Dr. Spuler has been recognised as *privat-docent* in Anatomy.—*Leipzig:* Dr. Friedrich has been appointed Director of the Surgical Polyclinic, in succession to Dr. Benno Schmidt. Dr. Barth of Breslau has been offered an Extraordinary Professorship of Otology.—*Lemberg:* Dr. Andreas Obrzut of Prague has been appointed to the chair of Anatomy.—*Marburg:* Dr. Hess of Leipzig has been appointed to the chair of Ophthalmology in succession to Dr. Uhtoff.—*Naples:* Dr. Ajevoli has been recognised as *privat-docent* in Surgical Pathology.—*Prague (German University):* Dr. Pick has been recognised as *privat-docent* in Medicine.—*Strasburg:* Dr. Kausch has been recognised as *privat-docent* in Medicine.—*Vienna:* It is intended to establish chairs of Hydro-therapeutics in this and other Austrian universities without delay.

THE LANCET.

LONDON: SATURDAY, OCTOBER 17, 1896.

THE introduction of reliable means of obtaining true anæsthesia during the performance of surgical operations has produced wide-reaching consequences. The last fifty years have demonstrated that but for such a triumph very many of the accomplished facts of surgery could not have been achieved. The prolonged manipulation, the dissection, and the precision which characterise the graver procedures of the surgery of to-day could hardly be attained in the case of a conscious and restless patient. In diagnosis, as in operation, the surgeon looks to anæsthetics for material assistance. The career of ether as a claimant has not been uncheckered. After one year of ascendency it became overshadowed by SIMPSON'S great discovery, chloroform. Had not deaths followed so frequently in the early days of chloroform there is little doubt that ether would have found fewer friends now. Improved methods of administration, notably CLOVER'S plan of giving nitrous oxide before the inhalation of ether and so obviating its unpleasant pungency, have taught the present generation to regard ether as a compeer of, if not a superior to, chloroform. During fifty years much work has been done to elucidate the action of anæsthetic agents and increase our knowledge of their physiological behaviour. Soon after the introduction of chloroform Mr. THOMAS H. WAKLEY investigated its action, and SNOW quotes his views although not agreeing with them. After forty-eight years THE LANCET has again done its *devoir* in completing its clinical inquiry into the action of anæsthetics and issuing a unique volume bearing upon the subject.[1] Physiologists have ever found the action of anæsthetics a favourite ground for investigation, and their labours have done much to make clearer the mazy depths of the intricacies which enclose the arcana of truth. Among the noteworthy attempts in this direction come the Commissions of Hyderabad and the splendid work associated with the name of LAWRIE. If these Commissions do not bring conviction to the minds of those who are accustomed to study the subject more from the clinical than the experimental side it is from no flaw in the reasoning or experiments, but rather because they clash with equally careful and thorough work done elsewhere. That the glory of the great discovery of anæsthesia has been marred by the deaths occurring under its use none will deny. Probably the unsatisfactory paragraphs so often seen in the daily press add not a few victims to the list of casualties under anæsthetics. These deaths are certainly not in the majority of cases the necessary results of chloroform or ether. SIMPSON showed that fainting previously to an operation was by no means uncommon before ether was known, and that some persons never recovered. We have little doubt that many deaths occurring prior to, or at the moment of, operation are due to this cause. Then, again, the want of experience on the part of the person administering the anæsthetic may have been answerable for many more. Because nurses and others occasionally give poisonous draughts of carbolic acid by mistake men do not decry the antiseptic system of dressing wounds, nor should such beneficent agents as chloroform and ether be saddled with the blame because some who lightly employ them possess little or no experience and but slight sense of responsibility. The lessons which fifty years of hospital work with anæsthetics have taught may perhaps be summed up by saying that these substances are, considering their potency, marvellously safe in competent hands, terribly perilous when used by the inexperienced and inexpert.

Under the present system a student may or may not, as he elects, study with profit the subject of anæsthetics. Once qualified he may give any anæsthetic and incur one of the gravest of responsibilities—that of having a fellow creature's life in his hands. No one will deny that any anæsthetic is potent to kill when mismanaged, and yet the neophyte may feel little trepidation as he places his patient in the overwhelming sleep which borders the land of the shadows of death. That our medical students should be properly trained and then examined in the subject before a diploma is given to them has been urged more than once, but as yet no further steps have been taken. Early in the history of anæsthesia a German potentate promulgated a law forbidding the employment of anæsthetics by any save qualified medical practitioners: this wholesome enactment might well have been made in other and larger countries. As the law at present stands, nurses, hospital orderlies, and, sad to say, lay persons of even less knowledge can and do undertake the duties of chloroformists. Not long since a provincial surgeon in our columns publicly shielded a nurse who had chloroformed a patient who unhappily died under the anæsthetic. Daily experience has shown that, however valuable theories may be as to why one anæsthetic or another is safer or more dangerous, there are even more important considerations for the practical man: the knowledge that all anæsthetics need undivided attention, painstaking study, and heedful care in their use, and the appreciation of the facts that high percentages of chloroform kill and that ether must be given "with brains," are at least as important as academic dissertations. It may be said that the safest anæsthetic is dangerous in the hands of a careless administrator, and that the main requirement which is paramount in the equipment of an anæsthetist is that he should possess that necessary combination—conscientiousness coupled with common sense.

From the results of fifty years, surely it may be said that we know very much more now than we did then, that our apparatus is more perfect, our discrimination more keen, and our appreciation of the particular requirements of particular cases more thorough. As Englishmen, next year will prove even a greater anniversary for us to commemorate—that of the first use of chloroform; but on this occasion we readily

[1] THE LANCET and the Hyderabad Commissions on Chloroform, being the Report of the THE LANCET Commission appointed to investigate the subject of the Administration of Chloroform and other Anæsthetics from a Clinical Standpoint, together with the Reports of the First and Second Hyderabad Chloroform Commissions.

join hands with our transatlantic *confrères* and award to America the palm of having first made public proof of the possibility of general anæsthesia. In any case we may rejoice that the words which proclaimed the success of that memorable trial in the clinic of WARREN were uttered in the English language.

WE dealt in our last article with two of the questions to which we have referred as coming into special prominence in connexion with the forthcoming election of representative members to the General Medical Council. The third question, and that with which we have next to deal, relates to the position of practitioners who have accepted the service of the various medical aid associations and clubs. There is no doubt concerning the feeling of the profession as a whole upon this subject, but that feeling draws its strength very largely, and, indeed, in the main, from considerations of which the General Medical Council cannot take official cognizance. It is an unworthy position for a medical man to assume—that of a salaried officer of an organisation which exploits his professional work and appropriates his earnings. But it is not contrary to law and is not "infamous conduct" and therefore it does not fall within the disciplinary jurisdiction of the Council. The utmost which that body can do is to give expression to an opinion which should derive its weight from being the opinion of the profession at large, and in the capacity of interpreter and expositor of professional sentiment the Council enjoys no monopoly and no pre-eminence. It can only express, as other exponents of professional opinion have done repeatedly, a pious opinion that the undertaking of medical duty under such conditions is not only derogatory to the practitioner concerned, but also prejudicial to his work, which, under the arduous conditions that lay masters commonly prescribe, cannot be satisfactorily performed. It would, indeed, be very lamentable if any doubt could arise as to the opinion upon this subject held by the Council, for on all questions of professional ethics its bare opinion must have great weight both within the profession and outside it. But the Council would no more consult the interests of the profession as a whole than its own dignity if it were to dwell with insistence upon points with which it cannot deal effectively, and therefore, although it is well that the opinions of its members upon this point should be challenged and made known, it must not be supposed that election to the Council will enable the possessors of those opinions to make them tell in any way save as a moral force.

There remains the admittedly difficult question of the suppression of quackery, with respect to which it is matter of capital importance that the Council should be on the alert to do what lies in its power. About the extent of these powers and the mode of their exercise questions may well arise upon which, in the absence of judicial decisions, it is not possible to do more than offer opinions, which are liable to be contradicted. But at least it is clear that much could be accomplished by the General Medical Council if it would put the law in force against quacks both to expose and suppress their impositions upon the public. This has been proved beyond dispute by the success which has attended the efforts of other bodies. The fortieth section of the Medical Act of 1858, even if not a complete remedy for the mischief of quackery, is a very considerable instalment and one which depends for its efficiency entirely upon the force that stands behind it and sets it in motion. The General Medical Council has hitherto neglected the administration of this part of the Act, although it receives the proceeds of the penalties inflicted and is the trustee of all the funds which Parliament has provided for the administration of the Act. A doubt has been suggested as to whether the Council could act in these matters, but as the power to act really means the power to appropriate money to the purpose—for the rest is mere matter of detail and arrangement—the scruple seems a little overstrained. Moreover, the Council itself has at least in one case provided funds for the purposes of a prosecution under the section and has thus asserted the principle in question. What remains is for the Council to devise means for doing systematically and upon an efficient plan what it has hitherto neglected or done only in a casual and very ineffective manner, and upon this point there certainly ought to be no tolerance of diversity of opinion or even uncertainty on the part of the candidates. The men who are to join the Council as specifically representing the views of practising medical men ought to join it with a resolute purpose to use all the weapons which the law provides for the suppression of those forms of fraud which consist in imposing upon the sick, and chiefly upon the sick of the less opulent classes, the mischievous wares of the nostrum-monger.

To summarise, then: Of the four things which are desired by the profession at large from the General Medical Council two that Council can grant. These, therefore, it is reasonable to instruct the direct representatives to use their influence to obtain. The General Medical Council could, if it desired, have more representatives sent to it from the profession directly. The General Medical Council could protect the profession from much cruel aggression if it enlarged its scope on the pattern of the Incorporated Law Society. It may be advisable that it should do this and it may not. Possibly the machinery that it could set in motion would not be as effective as some of the voices without the Council's walls would have us expect, but this might conceivably be as much the fault of the *personnel* of the Council as of the wording of the Acts under which it has been created and from which it derives its powers. Concerning the third point, the relations between medical men and medical aid associations, it is not easy to see in what way the Council could be expected to assist the profession, although undoubtedly the lay organisations of such associations have in many localities oppressed medical men in grievous manner. A man must be allowed to make his own bargains, and to talk of the inherent iniquity of a medical man serving a lay employer is patently absurd, although one of the candidates has come very near to saying it. What is a steamship company, what is the War Office or the Admiralty, and what is a sanitary authority save a lay employer? Lastly, we have the question of midwives. Here the Council has to do two things—(1) to protect the interests of the public, and (2) to see that the rights of the general practitioner are not infringed. No one can desire that the Council

should look callously upon the sufferings of the parturient poor. If the Council can devise a fair scheme for their assistance it will find that the great mass of the profession will extol its energy and beneficence. But to create from the ranks of the midwives an independent and inferior order of medical practitioners would be to sacrifice the interests of the public and the profession alike.

To add to the influences adverse to the interests of the Members of the Royal College of Surgeons of England under which the appeal to the Fellows to express an opinion concerning the representation of the Members on the Council has been made, it has appeared good to the Executive Council of the Manchester Society of Fellows of the Royal College of Surgeons of England, numbering some fifty Fellows, to send round a reprint of an article, which appeared in the medical journals in June, written by Dr. HARDIE, who is a member of the Council of the College, and to say that this article fairly represents the views of their Society. Dr. HARDIE'S *brochure* has just sufficient cogency to influence the votes of those Fellows to whom he refers as having no extensive knowledge of College politics and those who have no knowledge at all. That the institution of the Fellowship has given a great impetus "to the promotion and encouragement of the study and practice of the science of surgery" we admit, but what warrant is there for the statement that giving to the Fellows the exclusive right to vote for, and to sit upon, the Council has been to any appreciable extent an inducement to practitioners to acquire the qualification? What warrant is there for the statement "that there are no interests of the Fellows apart from those of the Members, nor have the latter any apart from those of the former"? If it be so, why does Dr. HARDIE take the trouble to write against the Members of the College and do his best to prevent the formation of a strong bond of union between the Members, the Fellows, and the Council of the College?

We are told that "the Council is an academic body, with objects and functions apart from those of the profession generally." There are absolutely no objects and functions, academic or otherwise, of the Council in which the Members of the College are not entitled to have a voice and to share. The Members are as interested as the Fellows in the advancement of surgery. The fees which they pay for their examinations and diplomas are more than a *quid pro quo*, for they could obtain the same advantages for a smaller consideration elsewhere, and even now they cover half the working expenses of the College and laboratories, in addition to maintaining the Examination Hall and giving a handsome income to the examiners, some of whom sit upon the Council. The museum and library are largely supported from the same source and in these the Members have an interest equally with the Fellows. The Members of the College are as concerned as the Fellows in maintaining the standard of examination, and they are deeply concerned in all questions relating to medical education, and in both of these academic departments the Members are entitled to a voice. But the Council is not merely an academic body. It has functions pertaining to a guild. It exercises a disciplinary control over the Members and frames by-laws regulating their conduct. Are not the Members to have a voice in the making of by-laws? They had a voice in regard to the last modification of a disciplinary by-law, but only in a most inconvenient way—viz., by addressing the Secretary of State—and the Council had to modify the by-law which it had proposed. Is it not much more convenient and dignified for the Council to agree with the Members before applying to the Secretary of State? Then the Council undertakes to defend the Members in the enjoyment of their rights, privileges, and immunities, and it renders an annual account to the Members of its proceedings, which it presents at the annual general meeting of Fellows and Members, when it is so often subjected to adverse criticism. Would not the Members be more efficiently protected by having representatives, and would not the annual meetings be distinguished, not by discordant voices, but by unanimity under the like circumstances?

The College is not merely an academy, but it is a great professional institution, and if the Council intends to confine itself to its academic functions and not to interest itself in all that pertains to the daily practice o the great body of surgical practitioners which is the source of its strength and importance, this course would be its strongest condemnation and would supply the proof of the indifference and negligence which Dr. HARDIE demands before any change whatever is made in the composition of the Council. It is lamentable to hear that there is any member of the Council of the College who considers that topics of vital importance to its surgical constituents are "lowering and retrograde," and who desires to sit on the Council in academic isolation indifferent to the struggles and difficulties of the Members of the College. It is lamentable that a member of the Council should use all the influence that he possesses to prevent a few seats being added to the twenty-four occupied by the Fellows for the purpose of enabling the Members to possess a voice in all collegiate affairs, promoting union and harmony where there are now division and discord, and so strengthening the Council and the Corporation as to increase their influence in all professional matters which are brought before them. Notwithstanding the adverse conditions under which the present appeal of the Council has been made we trust that the Fellows who have not yet recorded their votes will rise to the occasion and endorse the resolution passed at a representative meeting of eighty-one Fellows in January, that "it is desirable to give to Members of the College direct representation upon the Council, to bring to an end a period of disunion, and lay the foundations for the increased prosperity of a great institution which needs the loyal adherence of all its constituents to enable it to maintain its ground against the competition of universities and under the new conditions with which it will have to cope."

SICK NURSING IN BRIGHTON.—An association for the sick nursing of the poor has just been re-organised and re-established for the three towns of Brighton, Hove, and Preston. The movement has received very widespread support, but in such a huge and thickly populated district it is needless to point out that the present provision can only be temporary as regards its magnitude.

Annotations.

"Ne quid nimis."

THE DEATH OF THE ARCHBISHOP OF CANTERBURY.

THE death of the Archbishop of Canterbury is an event of national importance. The Archbishop was a distinguished figure in the nation and enjoyed that position in the public eye which is only conceded to men of high character coupled with corresponding intellectual endowments. He was a moderate High Churchman, but he was broad enough to sympathise with all classes within his own communion as well as with those outside. In short the great abatement of strife between contending sects and theological parties, which is a feature of the last ten years, is doubtless largely due to his wisdom and spirit. His power of work seems to have been prodigious. A writer in the *Times* tells us that at Wellington College he would often work twenty out of twenty-four hours. And in later years he has taken his holidays often in mountain climbing with ecclesiastical friends, feeling as if he were going to school again. Few deaths of public men have been so keenly felt by all classes, from the throne to the cottage. No doubt this is partly due to the dramatic circumstances of it, happening as it did (with tragic suddenness) when he was the guest of Mr. Gladstone, in his historic retirement, and worshipping as a private worshipper in a village church. But apart from this circumstance we cannot fail to see that a great figure has suddenly disappeared, one on whose shoulders current events laid a heavy burden of care very bravely borne, and to whom his Church and his order looked much for guidance. For the manner of his death many will be ready to account; those who know least perhaps will be most ready to say why the great Archbishop, who had endured so many labours, died in the very midst of his repose, and after a pleasant visit to Ireland, where he had gone to enjoy himself, and where he did most profoundly enjoy the characteristic hospitality of that nation. This is not the place to dogmatise on the pathology of his case or on the suddenness of the cessation of his great career. Contrary to the Litany which he loved so well, his translation was an "improvisa mors." We can only join our condolences to those of other classes and sympathise with those most nearly affected. Whether his great labours and cares precipitated his death or not they constitute the chief glory of his life, and will occur as a consolation to his bereaved family.

> "Nor love thy life, nor hate; but what thou liv'st
> Live well, how long or short permit to Heaven."
> *Paradise Lost*, Book xi., 553–4.

WEATHER FORECASTING.

THE evolution of scientific weather forecasting is a subject full of interest to medical men, since the influence of weather upon the public health is well known. Meteorology can hardly be considered as exact as the other sciences, and the predictions, therefore, in regard to atmospheric changes are not as reliable as could be wished, nor can certain meteorological conditions be safely anticipated more than twenty-four hours in advance of the time of making observations. Everything depends, of course, upon a consideration of observations made daily at stations distributed over the country. The results are telegraphed to the central office, where they are mapped out, the barometer and thermometer in figures, the wind by an arrow flying with the wind and with barbs proportional to its strength. These entries are made over the spot upon the map which represents the station whence these data are derived. When all the reports have arrived lines are drawn joining places at which the barometric pressure is the same (isobars), and through those of which the temperature is the same (isotherms). A distinct relation is immediately evident between these isobars and the arrows representing the direction and force of the wind. Roughly, the arrows are parallel with the isobars and they are more barbed—i.e., the wind is stronger the closer the isobars are together. Generally these isobars are curved and enclose an area either of low or of high barometric pressure. In the former case there is said to be a cyclone, in the latter an anti-cyclone. If the central barometric pressure be very low and the isobars close together a violent storm is in progress; if the central pressure be high and the isobars wide apart there is a calm, and in winter generally a fog. The difficulty for the forecaster, especially in a small area like the British Isles, is to tell what direction this cyclonic or anti-cyclonic system will move. "There are, moreover, V-shaped depressions, secondaries, and other varieties of distribution of pressure to be detected and taken into account, so that, on the whole, a British forecaster probably requires boldness as much as he needs knowledge." So observes Mr. G. J. Symons, F.R.S., in a very interesting but much too short paper in the current number of *Science Progress*, from which we derive the foregoing brief outline of meteorologic methods. In this paper the history of scientific weather forecasting is traced. This history is necessarily brief, the first record of weather that can be discovered appearing in an entry on the map of Virginia, published in 1747 by Lewes Evans, to the effect "that all our great storms begin to leeward." Observations continued to follow until in 1830 the construction of weather maps was in vogue with leading meteorologists. It was not, however, till the invention of the electric telegraph in 1837 that weather forecasting was brought to the dignity of a science, and in 1860 the first daily weather report issued by the Meteorological Office appeared in the *Times*. A strong effort was next made to produce a daily telegraphic weather map, but the scheme fell through, and "England, which had been the first to produce one, was left without a daily weather map for twenty-one years, until in 1872 the English Meteorological Office consented to issue one." Weather reports and observations are now, however, systematically issued from our well equipped and well-manned meteorological office and published each morning in the daily papers, besides which advices are telegraphed, we believe, to inland country stations for the benefit of those engaged in agriculture and others. The value of such an organisation to those on land and on sea cannot be overestimated. The accurate forecasting of English weather, which is so proverbially capricious, is attended with peculiar difficulties; but in spite of the enormous diversity in the nature of the "samples" which are constantly being experienced it must be acknowledged that the work of this department is, as far as the position of the science permits, efficiently carried out.

HOSPITALS AND PUBLIC LIBRARIES.

SOME time since the public library authorities of West Ham decided to supply certain books and papers withdrawn from circulation, or of which there were duplicates, to the Plaistow Hospital. These are added to from time to time. A few simple rules have been made and a framed typewritten catalogue, stockbook, and register provided. This arrangement has been greatly appreciated, not only by the patients, but also by the staff, and we think that the example of the officials of the West Ham Public Library might well be followed in other similar institutions. Of course, special arrangements and care would have to be taken to avoid spreading infection, but this might be easily

done by the exercise of a little forethought. Most of the voluntary hospitals have libraries of a kind already, but we fancy that the municipal hospitals are not so well off, and as these institutions, being fever hospitals, are far more cut off from the world than are the general hospitals, there is all the more reason why amusement should be provided for such of their inmates as are able to enjoy it.

FALSE ALARMS OF FIRE.

WITH reference to our annotation in THE LANCET of Oct. 10th we are happy to be able to record that one false alarmist has been caught. He is a young gentleman of tender years—namely, fourteen—and he turned out the Fire Brigade to a non-existent fire in Queen Anne's-gate. He was suspected of having given several other false alarms, as in the office where he is employed there is a telephone and the alarms were given in a boy's voice. Master Parsons has now retired for a space of fourteen days, failing to obtain any surety for his good behaviour for six months, and such surety, we should say, he would not obtain. This ingenuous youth has evidently mistaken his vocation. Imagination which can depict non-existent fires in so many localities as his presumably has might find a lucrative vent in the manufacture of "penny bloods," for even that masterpiece of phantasy, the ball at the Vatican in "Jack Harkaway," pales before the efforts of Master Parsons.

EXPERIMENTS ON LIVING ANIMALS.

IN the return to the House of Commons showing the number of experiments performed on living animals during the year 1895 the inspector has given in tabular form a very full record of the experiments carried out under licences current under Act 39 and 40 Vict., c. 77. This return, as usual, contains the names of all persons who have held licences or special certificates during any part of the year, together with a statement of the registered places at which the licences were available; it also contains the total number of experiments performed during the year, classified and arranged according to their general nature. The total number of those who held licences during the year was 213, but of these 65 performed no experiments. In order to show the stringent conditions under which the licences are held it is pointed out that "all the licencees were restricted to the place or places specified on their licences, with the exception of those who were permitted to perform inoculation experiments in places other than a 'licensed place,' with the object of studying outbreaks of disease among animals in remote districts." As the inspector points out, we have in these tables evidence—"(1) that licences and certificates have been granted and allowed only upon the recommendation of persons of high scientific standing; (2) that the licencees are persons who, by their training and education, are fitted to undertake experimental work and to profit by it; and (3) that all experimental work has been conducted in suitable places." These limitations are valuable, and in the eyes of those who are not biased should afford sufficient guarantee that vivisection is not carried on, by scientific men at any rate, either for pecuniary benefit or as a matter of custom and routine. It is pointed out that most of the experiments performed are connected directly with the diagnosis of disease and with the preparation of therapeutic agents for the treatment of disease. In this connexion it is certainly a matter for consideration whether inoculation experiments, the majority of which are unattended by as much pain as is inflicted in vaccination, slight as that is, should come under the Experiments on Animals Acts at all, though, as might be pointed out, it is perhaps as well that experiments should only be carried out by those who have fitted themselves for the work and who are likely to make the best use of experimental investigations. We are no advocates of indiscriminate experiments on living animals; unnecessary suffering is only inflicted by the careless and thoughtless, and for this reason alone it is well that some investigation should always be made as to the capacity of an experimenter before he is allowed to carry on experiments; but it being recognised that there is work to be done no obstacles should be placed in the way of using animals for experiments where no other means are available for the settlement of the question under examination. In the inspector's report we find that under licence alone there were performed 1333 experiments, or one-fourth of the whole (4679); in these experiments the animals suffered no pain, as complete anæsthesia was maintained from before the commencement of the experiment until the animal was killed. Experiments performed under A, or E, or F along with A (2358), were all simple inoculations and were practically unaccompanied by any pain. Under certificate B, along with EE and F, 761 experiments had been made, the remainder, 227, being performed under certificate C. In Ireland there were performed 8 experiments under the licence only, 12 under Certificate A, and 20 under Certificate B. Four of these were directed to the diagnosis of canine rabies and 20 were in connexion with physiological experiments. We are glad to notice that, on the one hand, the licencees have, as usual, manifested strict loyalty to the letter and spirit of the Act, only 2 cases of irregularity on the part of licencees having called for official notice on the part of the Home Secretary of State, whilst on the other hand, though the Act is carried out so strictly, regard for the requirements of those who are conscientiously endeavouring to study the cause and treatment of disease are never lost sight of.

ANTI-VACCINATION AT READING.

THE anti-vaccination campaign does not seem to have been one whit diminished by the overwhelming proofs of the value of vaccination given in the final report of the Royal Commission. An esteemed correspondent in Reading informs us that this movement has been very active in that town, where quite lately a meeting was held and addressed by Mr. Hadwen, whose work in Gloucester early in the year did much to confirm the people in withholding the protection of vaccination from their children—to their bitter cost as events shortly proved. Mr. Hadwen's address in Gloucester on Jan. 25th was reprinted and widely circulated. A few weeks later the hospital was filled with young unvaccinated children who had contracted small-pox at school, and many of whom died. There is no shadow of doubt that if at the time that that speech was delivered there had been shown the same energetic recourse to vaccination as was taken subsequently, these innocent victims would not have perished. Mr. Hadwen, we learn, has now established himself in Gloucester as the medical officer to an organisation for the treatment of disease on hydropathic principles. It is amazing that he should have any followers there after the frightful experience Gloucester has gained from reliance upon his fallacious sophistries. Reading, however, seems likely to emulate Gloucester in its perversity, and our correspondent forwards to us a pamphlet written by a "botanical practitioner" which is full of the well-worn arguments preached by Mr. Hadwen and others, besides containing abuse of the general bulk of the medical profession. The author of the pamphlet, who has been given free opportunity to air his views in the columns of the local press, complains that challenges to discuss the question in open debate which he issued to a medical practitioner and a minister of religion have been ignored. These two gentlemen showed their good sense in taking no notice of the challenge. The

question has been decided impartially by the Royal Commission, which declared that it was impossible, from the mass of evidence before them, to resist the conclusion that vaccination diminishes the liability to attack and that it renders the disease less fatal and of a less severe type. Our correspondent believes that "the report of the Royal Commission will cause much opposition to vaccination." We should be loth to think so, and can only say that if it does have that effect it will prove that the English people have less intelligence than they are generally credited with.

JUDGMENT AGAINST A QUACK.

WE are glad to see that justice has overtaken one more quack. L. Thomasso of 148, Westminster-bridge-road was upon Monday last fined £20 for unlawfully practising as an apothecary. The Medical Defence Union prosecuted on behalf of the Society of Apothecaries. A witness said that he went to see Thomasso and complained of not feeling well. Thomasso gave him a bottle of medicine and charged 2*s.* 6*d.*, telling witness to come again next week. Witness went a second time, when he was examined with a stethoscope and received another bottle of medicine, the fee this time being 1*s.* 6*d.* After the prosecution was started Thomasso went to the prosecuting solicitors and offered them £10 to stay proceedings. In defence he said he had never examined the witness or given him medicine. Mr. Thomasso has had to part with 160 half-crown fees, but we are afraid this will not stop his practices. However, it is some comfort to know he has been mulcted even to this small extent.

VENTILATION AND WARMING OF CHURCHES.

THE ventilation of churches in which the worshippers are packed with an irreducible minimum of floor space, which no excess of height can compensate, is notoriously defective and, indeed, is worse in proportion to the thoroughness of the heating, since the higher the temperature within the building the more carefully are cold draughts excluded, and were congregations generally composed of the class of persons who throng the police and county courts the state of the atmosphere at the close of the service would be well-nigh intolerably offensive. We, therefore, have read with interest the description of a new departure in the system of combined warming and ventilation introduced by Professor H. Fischer, the well-known heating engineer, in the new memorial church at Berlin, which in its general plan resembles St. Paul's cathedral in London, though of smaller dimensions, the height of the nave and transepts being 82 ft. and of the dome 237 ft., the corresponding measurements in St. Paul's being 100 ft. and 360 ft. respectively. To the height of 80 ft. from the floor the walls are traversed by hot air chambers, so that from the ground to the galleries 22 ft. above there is no perceptible difference of temperature, the air being kept constantly at 15° C. (60° F.). The aim of the engineer has been the removal from the space occupied by the congregation of the paths followed by the currents of air conveying the warmth from the sources of heat to the radiating surfaces by placing the heating apparatus high up in the neighbourhood of the cooling surfaces, maintaining, in reversal of the usual procedure, a higher temperature in the upper portion of the building and intercepting and re-heating the cooled air in its descent towards the lower part occupied by the congregation. There are, thus, four strata of air of different temperatures. On the ground floor and in the galleries there are very few coils, but along the first entablature, at a height of 95 ft. they are sufficiently numerous to counteract the loss of heat through the walls, which are there no longer traversed by hot-air channels, and to maintain from this level to that of the second entablature—at a height of 145 ft., or 50 ft. above the first—a temperature a few degrees Centigrade higher than that in the parts below. Other coils are fixed above the second entablature and in the lantern of the dome. To avoid the dangerously chilling draughts that would follow the opening of the doors in the intense cold of a Prussian winter the entrances are provided with double swing doors and coils placed in the intervening passage. Professor Fischer maintains that the system of heating the upper more than the lower regions of the air is the only proper course in such lofty buildings as churches, for, whereas with the ordinary method the air heated on or below the ground level is cooled on reaching the roof and, fouled by the products of respiration, descends again on to the heads of the congregation, unless withdrawn by some such exhausting arrangement as is carried out in our Houses of Parliament, in his system the fresh air is warmed to an agreeable temperature in its passage through the channels in the walls, and its ascent is favoured by the coils between the first and second entablatures, those in the dome, although they do not contribute to the warming of the parts occupied by the worshippers, serving effectually to prevent the descent of the foul air by securing its continued ascent towards, and escape through, the apertures in the lantern that crowns the edifice.

IMPERFECT CLOSURE OF THE HEART WALLS.

A CASE of great interest is recorded in the *Medical News* (New York) for Aug. 29th by Dr. F. A. Packard. It is one of imperfect closure of the auricular and ventricular septa in a man who died at the age of fifty years from abscess of the brain. The whole case is carefully chronicled, but we only wish to draw attention to the condition of the heart, for the patient had performed the arduous work of a sailor and yet, as the necropsy revealed, was the subject of a great lack of development of the heart. This organ was globular in shape, the apex being made up of the right ventricle. A large proportion of the total bulk of the heart was composed of the right auricle. The weight of the organ was fifteen ounces. The right auricle was tremendously dilated and its appendix was also much enlarged. The thickness of the wall of the right auricle at its thickest part was about 2 mm. The foramen ovale was patulous, admitting the end of a lead-pencil. Immediately below the foramen ovale there was a deficiency in the inter-auricular septum, leaving an arched entrance from the right to the left auricle that permitted of the insertion of the index, middle, and ring fingers. The arch was composed of muscle-fibre, its edge was smooth and rounded, and the surrounding endocardium was thin, clear, and otherwise normal in appearance. The orifice in the septum was bounded below by the lines of attachment of the anterior mitral and posterior tricuspid leaflets. On looking into the right auricle from above could be seen the auricular surfaces of the mitral and tricuspid leaflets and also through the deficiency the posterior wall of the left auricle. The left auricle was very much smaller than the right, being even somewhat smaller than normal. The right ventricle was much dilated and its walls hypertrophied. The tricuspid orifice admitted four fingers; the valve leaflets of the tricuspid were normal except for their extraordinary largeness. The chordæ tendineæ of the valve were remarkably numerous and very thick. The undefended space was closed merely by the posterior tricuspid and anterior mitral leaflets. The finger readily passed from the channel of the tricuspid into that formed by the mitral leaflets, and the finger so passed through the inter-ventricular deficiency could be plainly seen on looking down into the auricles. The pulmonary artery cusps were very large, but otherwise normal. The cavity of the left ventricle was relatively small, about two-thirds

that of the right ventricle. The mitral valve was also peculiar, the anterior portion of the anterior mitral leaflet being pushed through the deficiency in the septum in such a way that upon looking at the edge of the deficiency from the right ventricle there were seen several short chordæ tendineæ rising from the right side and edge of the septal border and running through the orifice to join the anterior portion of the anterior mitral leaflet. Dr. Packard has done good service in publishing this case in detail, for it is a most unusual and instructive one.

DEATHS IN HOTELS.

THE last report of H.B.M. Consul at Naples affords some interesting reading concerning charges in Neapolitan hotels on a death taking place therein. He instances one case where a traveller having died from a non-infectious disease the landlord sent in a claim for damages in addition to his bill of £80, which, however, was reduced to £60 upon representations from the Consulate. The Consul at Naples suggests that as these cases are probably constantly arising in other places also some definite scale of damages should be agreed to. He proposes £50 in case of death from infectious disease and £20 when the cause of death is non-infectious, this scale to rule when rooms are let at 10*s.* a day and over; but in cases where the rooms are let at under 10*s.* he suggests half the amount of damages. We think this seems a very fair arrangement. It is only right that a landlord should be compensated for the expense and loss of business which he undoubtedly has to put up with in the event of a case of infectious disease, even though non-fatal, occurring in his hotel. Then, too, the majority of tourists are so timid that the very fact of a death having happened in a hotel, whether from an infectious disease or not, drives them away. On the other hand, the average landlord, naturally enough, is prone to make all he can out of the traveller, and it is necessary that some check be put upon him.

THE STREET MUSICIAN NUISANCE.

THOSE who, of late especially, have been doing their best to suppress the unmitigated nuisance of street noises in the metropolis will read with rejoicing some very sensible remarks of the Brighton stipendiary magistrate, Mr. C. G. Heathcote, in a case of more than average aggravation. An "adjutant" in the Salvation Army was summoned for that, "being a street musician," he continued to play after being requested to desist by a householder. This latter gentleman had his father ill in bed in the house, and the usual "service" of the army was accompanied by the defendant on a concertina, and a complement of tambourines. The prosecutor asked the defendant to go away, telling him of his father's illness. Defendant replied that he would not believe it until he had seen the father, but the prosecutor promptly and most properly declined to allow him to enter the bedroom. The defendant also, according to the prosecutor, asked if his father was on his death-bed and if he was prepared to go to heaven or hell. The army continued its service until a constable was fetched and moved them, when they marched away to the music of a full brass band. The stipendiary summarily disposed of the technical point that defendant was not a "street musician," saying he had decided five years ago that members of the Salvation Army who played in the street were street musicians. Had an apology been offered in this case he might have accepted the suggestion of the prosecution for a nominal penalty. Instead, the defendant had seen fit to fight out the case to the bitter end as though some principle were at stake, which there was not. He could only characterise as monstrous, outrageous, and impudent, the assertion that a person causing a nuisance as defendant had done was to be the judge whether a person who objected to the nuisance was in such a state of health as to require it to be stopped. He refused to do anything less than impose the full penalty of £2 and costs. Workers at the best of times object to the noises of this or any other "army" as a persistent and intolerable nuisance, but the stipendiary's adjectives were not one bit too strong, and the gross impertinence of the nature of this "adjutant's" suggestion is nothing less than scandalous.

THE SOUTH AFRICAN MEDICAL DIRECTORY.

WE have received the first volume of this publication, which, according to the preface, will be issued in January of every year. It contains, so far as could be ascertained, the names of all registered medical men and dentists residing in Cape Colony, Orange Free State, the South African Republic, Natal, and Rhodesia, with the names of the naval and military officers serving in the district. The Bishop of Bloemfontein appears as John Wale Hicks, without the Right Reverend and with the addition of "retired," and in the district of Rhodesia we find the following modest entry: "Jameson, Leander Starr, C.B., Salisbury, Mashonaland (retired), M.D. Lond. (1877), M.B. and B.S. (1875), M.R.C.S. Eng. (1875)." An asterisk prefixed shows that as Dr. Jameson did not return the circular sent out the editor declines to be responsible for the correctness of the entry. Rhodesia boasts of five hospitals. It may be interesting at this juncture to set forth the rules and regulations for practice as existing in that home of democracy, the Transvaal. The analogue of our General Medical Council is as follows:—

"Art. 2.—The State President shall have the right to appoint a committee of three or more persons, duly qualified to practise the medical art or to dispense medicines, called 'Medical Committee of the South African Republic,' and which shall have the supervision of the civil medical interests in the Republic, subject to the under-mentioned provisions; and the President shall be at liberty, if he thinks fit, to dismiss members of the board, or in case of resignation, removal, absence, incompetency, or death of one or more of them to appoint another or others, as he thinks fit, in their place.

"Art. 3.—Anyone who after this wishes to be admitted to practise as physician, surgeon, and accoucheur, or to dispense medicines or drugs, as apothecary, chemist, or druggist, must for that purpose have a licence from the State President. And anyone who wishes to practise as above-mentioned shall, in order to obtain such a licence, submit his diploma or other certificate for examination and approbation of such Committee, in order to prove that he is really qualified for such a branch or branches of the medical profession as he professes."

The following is the rule under which practitioners must be registered:—

"SOUTH AFRICAN REPUBLIC.

"Anyone wishing to be registered as a medical practitioner in this State should make written application to

"The Secretary,
"Board of Examiners,
"Pretoria,

enclosing his original diplomas to show that he is fully qualified to practise Medicine, Surgery, and Midwifery. These qualifications must represent a compulsory four years' Medical Study. (Minimum.) A declaration of identity should accompany the application.

"A Medical Board advises on all applications.

"Licence to practise.....£25."

Affixed to the Directory for Cape Colony is the Medical and Pharmacy Act of 1891, which provides for the registration of midwives.

"HÆMORRHAGIC PLEURISY."

A PAPER on Hæmorrhagic Pleurisy is published by Dr. G. G. Sears in the *Boston Medical and Surgical Journal* of Sept. 17th. It is based on an analysis of thirty cases, twenty-seven men and three women, taken from the records of the Boston City Hospital, in whom a pleural effusion sooner or later in its course assumed a hæmorrhagic character. Special interest attaches to the etiology of these cases from the very generally received opinion that tuberculosis and cancer are the most frequent causes. The writer considers that the number of cases under consideration is too small to allow conclusions drawn from their analysis to be

embodied in statistical form, but the following propositions seem justified: (1) hæmorrhagic pleurisy may occur either as a primary affection or as a complication arising in the course of other diseases; (2) that as in other forms of pleurisy tuberculosis is the etiological factor in a very considerable number of cases, yet the proportion due to other causes is so large that the mere fact of its hæmorrhagic character does not justify a diagnosis of tuberculosis, even in the absence of cancer, without corroborating evidence; (3) that among other causes the pneumococcus takes a prominent rank, but other micro-organisms occasionally are found as the infecting agent; (4) that in a large proportion of the cases conditions are present which lead to an easy escape of blood from the vessels by producing changes either in the blood, in the vessels, or in both: among them may be mentioned advanced age, alcoholism, and the presence of severe constitutional diseases, of which nephritis and rheumatism are the most prominent; (5) that, as in cases of simple serous effusion, the prognosis must be individualised and based on the underlying causes and the general condition of the patient, but that taken as a whole from the frequent association of other diseases the prognosis is graver than in simple pleurisies, yet a very considerable number completely recover; (6) that except when it appears as a complication in the later stages of some other disease a hæmorrhagic effusion may be expected to run a favourable course, as in a majority of the cases the chest does not refill after operation, which may, however, have to be repeated once or twice; (7) that, as in simple serous pleurisies, a certain proportion of cases will eventuate in empyema, but that there seems to be no special tendency toward this result; and (8) that in the occasional cases where the chest rapidly refills aspiration should not be repeated too frequently lest more harm result to the patient from the loss of blood than from the presence of the fluid.

POISONOUS MUSHROOMS.

OUR correspondent at Rome has drawn attention to the calamitous frequency of mushroom poisoning in Italy, and unfortunately these regrettable accidents seem to be equally prevalent in France. On all sides, says a writer in *Le Progrès Médical*, fatal cases of mushroom poisoning are reported. At Talaudière, near Saint Étienne, two children have succumbed, and a man has been carried to hospital in a hopeless condition. At Saint Chamond a housewife died after three days of intense suffering. At Lyons two inhabitants of Montplaisir were in a critical state. At Valence the wife of an eating-house keeper, in whose establishment several cases of poisoning have occurred, has just died; and at Montmiral, in the same neighbourhood, a farmer, his wife, and a servant barely escaped death thanks to powerful emetics, which, however, proved insufficient to save a boy aged thirteen years who had shared their repast. From Belfort we hear that a man having gathered some mushrooms in the forest ate them in company with his son and a friend. All three presented symptoms of poisoning almost immediately; the son died on Tuesday, the friend the following day, and the father himself was not expected to survive. A family living at Tarbes, consisting of a father, mother, and four children, partook of a dish of mushrooms with tomatoes on Aug. 28th. The next day all showed signs of poisoning and in spite of medical aid the parents and one child died during the night. The three remaining children recovered. At Saint Seine-en-Bache a married couple named Simonin, who for fifty years had been engaged in the mushroom trade, consumed part of their stock one evening and the same night were seized with violent pain and vomiting. A medical man did all that was possible, but the sufferers both died within a few hours of each other. Three cats which are said to have licked up the vomited matter likewise died. Perhaps, continues the reporter, the peculiarly tempestuous character of the present autumn may have had an intensifying effect on the toxic properties of the mushroom family. In tropical countries, as is well known, many plants develop an activity of secretion far exceeding their habit in temperate regions. According to this hypothesis special precautions should be taken in stormy weather to establish the innocuousness of an agaric before using it for food, but apparently this year careless gatherers have been more numerous than ever. In order to familiarise the public with the appearance of deleterious fungi an apothecary resident in one of the districts where fatal cases have been numerous conceived the happy idea of exhibiting specimens of all the indigenous varieties in his shop window so that passers-by might look and learn. This example could be imitated with advantage; and if space failed for the exhibit, surely the familiar jars of coloured water might be sacrificed. Lay journalists, says the anonymous but witty writer in conclusion, are in the habit of offering more or less sagacious advice on mushroom poisoning and its treatment, thereby laying themselves open to the charge of practising medicine illegally. These gentlemen would do well to remember the old adage, "*ne sutor ultra crepidam.*"

"A CASE OF ABSENCE OF THE THYMUS GLAND IN AN INFANT."

ALL anatomists are agreed that absence of the thymus gland is an exceedingly rare event; in fact, many writers have denied that this organ has ever been found wanting. So constantly is it present that Hangsted said, "Inter constantissima hominum organa est thymus,"[1] but even this writer acknowledges that he has found it absent in acephalic monsters,[2] and several other observers concur in this statement.[3] Curiously, in anencephalic monsters it has been found abnormally large. T. L. von Bischoff has recorded its absence in a well-developed stillborn child.[4] Alex. Friedleben met with this condition in four cases; one was a fœtus at full term, but the others were children who had reached the age of five years in two cases and six years in the other; they had shown no symptoms which could be attributed to the absence of the gland.[5] The same observer found the thymus gland wanting in a hedgehog four months old. The fact that the absence of this gland has been so seldom noticed may be in part, at least, due to the fact that it is not often looked for. The symptoms in the case recorded by Mr. Clark in another part of our present issue are of great interest in connexion with the difficult subject of the functions of the organ.

CATARACT IN THE MADRAS PRESIDENCY.

SURGEON-MAJOR POPE, who is the chief of the Ophthalmic Hospital, Madras, has just issued a little brochure giving the results of his operations for cataract upon the natives of India and others. He has had the advantage of having had under his care eighty beds. He finds that the Hindus are good subjects for the operation, the non-flesh-eating being cleanly in their habits, particular in regard to their food, and, as a rule, enjoying good health. The normal eye of the Brahmin, he remarks, is a typically fine organ, "its different structures are of a fine texture, its appearance is bright and clear, and operations, when

[1] Hangsted: Thymi in Homine ac per Seriem Animalium Descriptio, p. 9.
[2] Loc. cit., p. 166.
[3] Gergens: Anatomie der Kopflosen Missgeburten, p. 77.
[4] Von Bischoff: Entwicklungsgeschichte der Säugethiere und des Menschen, p. 280.
[5] A. Friedleben: Die Physiologie der Thymusdrüse, p. 41.

performed, lead to most satisfactory results." The flesh-eating Hindus are of coarser texture, their eyes are often congested and stained brown, and the lids are thick, but they also appear to do well under operation. The Pariahs are poor, often intemperate, not very particular about personal cleanliness, and of very varying degrees of robustness of constitution. Yet they also yield favourable results, but require more care and attention in regard to diet and stimulants. The Mohammedans are strong and healthy flesh-fed men; the structures of the eyeball resemble those of the Brahmin and react favourably to operative interference. The Malabaris form another class in whom, however, cataract appears to be commonly associated with failure of power in the retina and optic nerve, hence rendering it inadvisable to operate. Surgeon-Major Pope operates in the usual way, except that before using the knife a needle is introduced into the anterior chamber and the capsule is divided with care and gentleness. The section of the cornea is made upwards, and iridectomy is only performed if necessary. The arrangements for the operation are so good that Surgeon-Major Pope has been able on occasion to do twenty-four, or even twenty-six, operations for cataract in one morning. He appears to have had examples of all forms of cataract under his care. He may be congratulated on the remarkable success that has attended his work, the failures amounting to only 3·15 per cent. out of 2000 operations.

THE GUILD OF ST. LUKE.

IT has long been the custom for the legal profession to hold a religious function in connexion with their profession. The judges annually attend St. Paul's Cathedral in state, and the Scarlet Mass is still sung at the Sardinian Chapel. It has been thought good that the medical profession should hold a similar function, and accordingly the Guild of St. Luke has made arrangements for a solemn evensong to be sung at St. Paul's Cathedral at 7.30 P.M. on Oct. 21st, when a sermon was to have been preached by the late Archbishop of Canterbury. The honorary committee includes many leaders in medicine and surgery—men of all shades of churchmanship. Any medical practitioner will, we are informed, be welcome, and those who are authorised to do so are requested to wear their academical dress. The universal connexion between medicine and the Church has been often commented on, and there are at least three saints who are better known for their medical skill than for theology—namely, Cosmus, Damian, and Pantelemon. All three, though belonging to the Eastern Church, were honoured in the West, Cosmus and Damian especially, though there is a church in Venice dedicated to Pantelemon. We understand that Canon Browne (the Bishop of Stepney) has consented to preach in the place of the late primate.

PROTOZOA IN THE FLUID OF CANCEROUS PERITONITIS.

THE *Sitzungsberichte der Akademie der Wissenschaften zu Berlin*[1] contains an important preliminary communication on some amœba-like bodies found by Leyden in the ascitic fluid of cancer-afflicted patients. Two cases are recorded in which the opaque peritoneal exudate contained large, pale, either round or polymorphous cells, having star- or bristle-shaped processes, larger than leucocytes, containing fatty drops and pigment granules, and possessing active amœboid movement. Leyden's surmise that these bodies might be protozoa was confirmed by Schaudinn of the Berlin Zoological Institute. As regards the clinical diagnosis, in one case, that of a man aged sixty years, it was confirmed by the necropsy, which revealed a pyloric cancer with numerous metastases; in the other, that of a girl aged twenty-two years, knobby growths have been felt in the abdomen after each paracentesis. The microscopic procedure was as follows. A drop of fluid or its centrifugalised sediment was placed on a curved cover-glass and examined fresh. Multiplication by buds and by division was observed and many colonies (consisting of up to forty individuals) seen. Permanent preparations were made by spreading some of the fluid on a slide, fixing by immersion in a hot mixture of two parts concentrated sublimate solution with one part absolute alcohol, washing with 63 per cent. iodine alcohol, and staining with either Grenacher's or Benda-Heidenhain's hæmatoxylin. The writers do not wish "to say anything positive as to the possible connexion of the observed amœbæ with the coincident cancerous disease" until they have made further observations. Meanwhile, the organism is named Leydenia gemmipara, Schaudinn.

[1] Vol. xxxix., p. 13.

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE winter session of the Royal Medical and Chirurgical Society will commence on Tuesday, Oct. 27th, with a paper written by Mr. Hastings Gilford, F.R.C.S. Eng., entitled "A Condition of Mixed Premature and Immature Development," and communicated by Mr. Jonathan Hutchinson, F.R.S. It is anticipated that the paper will provoke a lively discussion among the students of, and workers at, teratology. It will be illustrated by limelight, and living subjects will be included among the specimens shown. On the following evening, Wednesday, the 28th, the President, Council, and Fellows, with their guests, will dine together at the Hôtel Cecil. No less than 130 Fellows have already promised to be present, but that figure will probably be largely exceeded. It may be hoped that this social meeting will be a source of pleasure to the Fellows and their guests.

THE FIFTIETH ANNIVERSARY OF THE INTRODUCTION OF ETHER.

THOSE who are interested in the vexed question as to who first promulgated the idea of general anæsthesia will find much to interest and not a little to regret in perusing Morton's book and the writings of Truman Smith and Bigelow upon the ether controversy. Whoever thought of ether first we cannot tell, but it is a matter of history that on Oct. 16th, 1846, William Thomas Green Morton gave "letheon" to Gilbert Abbott, a patient in the General Hospital, Massachusetts, while the elder Warren removed a vascular tumour from the left side of the man's jaw. Letheon was, of course, ether. Warren, although having an open mind, seems to have had his doubts of the genuineness of the discovery. It must be remembered that the unfortunate Horace Wells had only a year before essayed to anæsthetise a patient with nitrous oxide in the theatre of the same hospital. The result had been an ignominious failure, and had been stigmatised as a "humbug affair." Was letheon also to be an illusion, and was Morton, like Wells, to be hissed from the hospital precincts? How easily might Morton with his crude apparatus and wholly inadequate knowledge of his subject, to say nothing of his extreme nervousness, have utterly failed. Luckily he succeeded; the operation was painless, and Warren remarked, sardonically enough, "this at all events is not humbug." It was but a few weeks before letheon became unveiled and ether honestly recognised, and experimented with in the London and Edinburgh hospitals. Liston used it in the theatre of University College Hospital on Dec. 21st, 1846; Simpson, in Edinburgh, tried and pronounced ether a success in midwifery; but the plaudits were not universal. There were those who regarded ether as the accursed thing. To assuage

the pains of labour, to prevent the agonies of surgery, was to ride counter to the decrees of Providence and so was to court the ruin alike of body and soul. Surgeons of high repute taught that ether was a delusion, or, if a success, must and did interfere with the healing process. The new anæsthetic was classed with mesmerism, and its votaries were reckoned as little better than quacks and practisers of chicane. And this only fifty years ago!

SIR WILLIAM MACCORMAC.

SIR WILLIAM MACCORMAC, President of the Royal College of Surgeons of England, has been suffering since the beginning of last week from an attack of influenza, which has been complicated with pneumonia and bronchitis. Prostration, restlessness, and sleeplessness have been marked features of his illness. The pulmonary and bronchial troubles still cause some anxiety, although we are glad to be able to report that the fever has declined and that there is improvement in his general condition.

THE PASTEUR INSTITUTE FOR INDIA.

THIS Institute, the *Pioneer Mail* tells us, is now within measurable distance of becoming an accomplished fact. The subscriptions already collected amount to Rs. 70,000, and it is estimated that with Rs. 50,000 more the building might be commenced, equipment provided, and work begun at an early date. The question of site remains for the present in abeyance, pending the receipt of further information. Two stations have been named—namely, Kasauli and Darjeeling—the former in the Punjab, on the road to Simla, and the latter in the Himalayas, near Calcutta. It is now proposed, and very properly in our opinion, to enlarge the scope of the Institute. Originally it was almost exclusively intended for anti-rabic inoculations, but the scheme is now to include the application of bacteriological methods in the investigation and treatment of such diseases as cholera, diphtheria, anthrax, glanders, and tetanus, the investigation of tropical diseases, and the provision of a centre for the prosecution of scientific research, and the acquisition of advanced knowledge of bacteriological methods of dealing with disease. We quite agree with the suggestion of our contemporary that it would be well under such circumstances to substitute the name of Public Health Institute for India for that of Pasteur Institute. At a late meeting of the Central Committee at Lahore a good deal of business was transacted in furtherance of the object in view. Mr. Haffkine and others took part in the discussion and made some pertinent remarks as to the scope of the Institute and the importance of including such diseases as cholera, enteric and malarial fevers, dysentery, &c., as well as those connected with the large industries of India.

THE POLITICAL POWER AND USES OF THE MEDICAL SERVICES IN INDIA.

IT is too often forgotten that the medical profession has been instrumental in rendering immense services to the State in India. It can scarcely be expected that frontier tribes and native populations would view the presence of a military force invading their country with any satisfaction or that they should fail to do all in their power to manifest their enmity and opposition. But it has happened again and again in the past history of India that members of the medical profession have gained the confidence and earned the gratitude of the people, and in that way advanced the policy of the Government of India and paved the road to peace and amity. In 1879 the Kabul Dispensary did excellent work in this respect among a people bitterly opposed to us; and, as we took occasion to point out recently, the medical relief work performed during the late Chitral expedition was of great service in gaining the confidence of the natives. The people of that country have petitioned the Government of India to re-establish the dispensary at Chakdara, as a central and convenient position for all of their number desirous of seeking medical and surgical aid, and their request has, we now learn, been acceded to. A small dispensary is to be constructed and maintained within our little cantonment on the banks of the Swat River. A great and friendly change towards us has already been manifested, the people are only too glad to avail themselves of our medical skill, and there can be little doubt that this feeling will grow and develop itself and be productive of a thoroughly good understanding between the tribes and ourselves.

UPON Tuesday, Oct. 13th, Professor Rudolf Virchow, the noted pathologist, completed his seventy-fifth year, having been born in 1821. Many telegrams of congratulation were received by him, and we hasten to take this opportunity of felicitating our distinguished *confrère*.

THE Lord-Lieutenant of Ireland has appointed Mr. William Thomson, M.D. R.U.I., President of the Royal College of Surgeons in Ireland, to be Surgeon-in-Ordinary, in the room of Mr. Kendal Franks, M.D. Dub., resigned.

ALL the medical world will have learned with sorrow of the death of Moritz Schiff, the great zoologist, which occurred in Geneva on Tuesday, Oct. 6th. We shall publish an extended biography next week.

THE Queen has been pleased to appoint Mr. Thomas Bryant, F.R.C.S. Eng., to be Surgeon Extraordinary to Her Majesty, to fill the vacancy caused by the death of Sir John Eric Erichsen, Bart.

CALENDAR OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE annual Calendar has just been published by the Council of the College. It shows that there are 1175 Fellows on the roll of the College (against 1160 last year), of whom 990 obtained the Fellowship by examination, 15 were elected as Members of twenty years' standing under Section 5 of Cap. 15 Vict., 168 are Fellows by election, and 2 are *ad eundem* Fellows. There are 17,102 Members (against last year's total of 16,816) and 601 Licentiates in Midwifery, the examination for this licence having been discontinued since 1876. The Licentiates in Dental Surgery are stated to number 1092 and the Diplomates in Public Health to number 255.

During the past collegiate year 123 candidates presented themselves for examination in elementary anatomy, of whom 98 passed and 25 were referred. (This subject has now been eliminated from the first examination.) Forty-nine candidates presented themselves in elementary physiology, 39 of whom passed and 10 were referred; 475 candidates presented themselves in elementary biology, of whom 347 passed and 128 were referred. Of 540 candidates who presented themselves in chemistry, 352 passed and 188 were referred; in materia medica, of 176 candidates 117 passed and 59 were referred; in practical pharmacy, of 260 candidates 201 passed and 59 were referred.

The proportion of the fees paid by candidates for these examinations receivable by the College amounted to £2463 11*s.* 3*d.*, the examiners elected by the College receiving £281. The examiners in elementary anatomy and elementary biology are appointed by the Council, those in elementary physiology in conjunction with the Royal College of Physicians of London, and those in chemistry, materia medica, and practical pharmacy by the Royal College of Physicians of London, under the scheme for an Examining Board in England.

The examiners in anatomy and physiology for the Second Examination are appointed in conjunction with the Royal College of Physicians of London; they have conducted the Primary Examination under the Old Regulations as well as the Second Examination of the Examining Board; 773 candidates presented themselves for examination in anatomy, of whom 410 passed and 363 were referred; 753 presented themselves in physiology, 417 of whom passed and 336 were referred. The proportion of fees paid by candidates to the College for this examination amounted to £3449 5*s*., the examiners appointed by the College receiving £1249 8*s*.

The Board of Examiners in anatomy and physiology for the diploma of Fellow elected annually by the Council of the College held two meetings for the examination of 195 candidates, of whom only 83 passed, whilst 112 were referred. The fees received amounted to £1281, of which the Board received £780.

The Court of Examiners, ten in number, are elected by the Council from the Fellows of the College only for a period of five years. They conduct the third or final examination in surgery of the Examining Board in England as well as the second or final examination for the diploma of Fellow. During the past collegiate year the court held two examinations for the Fellowship and four for the Membership. At the former there were 85 candidates, 52 of whom passed, 3 were referred for one year, and three for six months. For the Membership 966 candidates presented themselves in surgery, of whom 610 passed and 356 were referred. The fees paid by candidates amounted to £10,874 4*s*., and the fees paid to the Court of Examiners and the examiners in midwifery amounted to £5892 10*s*. The examiners in medicine under the scheme are elected by the Royal College of Physicians of London. Of 1030 candidates examined 586 passed and 444 were referred. The examiners in midwifery are appointed in conjunction with the Royal College of Physicians of London and have examined 949 candidates, of whom 614 passed and 335 were referred.

The board of examiners in dental surgery have held two meetings for the examination of 120 candidates, 87 of whom passed and 33 were referred. The fees paid by candidates amounted to £913 10*s*., the board receiving £495 12*s*.

The examiners in Public Health appointed in conjunction with the Royal College of Physicians of London examined 43 candidates in Part I., 29 of whom passed and 14 were referred; in Part II. out of 42 candidates 25 received the diploma and 17 were referred. The fees received by the College for both parts amounted to £207 17*s*., the examiners receiving £134 2*s*.

With regard to the finances of the College it appears that the income from all sources amounted to £27,833 12*s*. 5*d*., the largest item being derived from the fees paid by candidates for the diplomas of the College—viz., £19,188 7*s*. 3*d*., the next largest being from dividends on the Erasmus Wilson bequest, £4845 7*s*. 8*d*.; rents from chambers adjoining the College produce £750; investments, £745 6*s*.; hire of rooms, sale of questions, &c., at Examination Hall, £603 4*s*. 11*d*.; incidental receipts at College, £28 17*s*. 9*d*.; receipts from trust funds, £278 6*s*. 8*d*.; dividend from sinking fund for Savoy Estate, £4 4*s*. 8*d*.; sale of stock (Walker Fund), £38; fees retained for candidates, £435 15*s*.; expenses repayable by Metropolitan Asylums Board at Midsummer Day, 1895, £186 5*s*. 9*d*.; balance at Midsummer Day, including half Goldsmiths' grant, £729 16*s*. 9*d*.

The expenses for the year amount to £26,347 10*s*. (leaving a balance at the banker's, including half Goldsmiths' Grant, £400, of £1486 2*s*. 5*d*.), the largest item being (as in the receipts) in connexion with the examinations—examiners' fees, £8832 12*s*.; half expenses of Examination Hall for the purposes of examinations, £4400 0*s*. 5*d*. (this amount includes rates, taxes, rent, and insurance, which absorb the no small sum of £2162 18*s*.); expenses of Fellowship and Dental Examination, £338 15*s*. 1*d*. Half expenses for the Scientific Laboratories on the Embankment amount to £830 8*s*. 7*d*. At the College rates, taxes, and insurance amount to £1778 2*s*. 3*d*.; extraordinary expenses, £596 11*s*. 4*d*.; alterations and repairs, £336 15*s*. 5*d*.; fees to Council, £252; salaries, wages, and pensions in the three departments (Museum, Library, and College), £4732 9*s*. 7*d*.; lectures, catalogue, specimens, &c., for museum, £621 0*s*. 11*d*.; purchase of books, &c., for library, £722 14*s*. 7*d*.; trust funds, £255 16*s*.; purchase of stock, £608 6*s*. 4*d*.; fees returned to candidates, £394 15*s*.; Metropolitan Asylums Board (re-payable), £282 0*s*. 6*d*.; miscellaneous items—i.e., fuel, light, printing, stationery, stamps, &c.—£1265 2*s*. 3*d*.; disbursement of Goldsmiths' Research Grant, £100.

From the librarians' report it appears that the supply of books has been well kept up during the past collegiate year. The donations include a MS. by Johannis Archile de Verona, entitled, "De Dolore Juncturarum," presented by Mr. John Tweedy. Mr. Arthur Maude of Westerham, Kent, has also given his valuable collection of monographs on Graves's disease, and Miss Hunter Baillie has presented another valuable series of MS. Including Journals and Transactions the total number of volumes in the library is about 50,000.

Amongst the additions to the museum may be mentioned a skeleton from a case of osteitis deformans, showing in a marked degree the changes characteristic of that disease; an important collection of cystic and other tumours originating in or around the kidney; and a roll of indurated omentum, more than a foot long, which was removed from the sac of a scrotal hernia. In the department of Human and Comparative Anatomy may be mentioned a magnificent specimen of the gigantic extinct bird, the moa (Dinormis maximus), from the South Island, New Zealand, obtained through the kindness of Mr. Hutton of Canterbury, New Zealand. The skeleton is especially interesting as possessing both coracoscapulars and big toes; neither of these are present in the specimen displayed in the British Museum. Although not striking preparations, the specimens of hag-fish (Myxine) have great interest.[1]

The Secretary's report contains an abstract of the work done by the Council and committees, the Committee of Management of the two Royal Colleges, the Research Laboratories on Victoria-embankment, also reports of meetings of Fellows and Members, results of elections, &c.

Under the direction and supervision of the Director of the Research Laboratories (Dr. G. Sims Woodhead) during the year from June 8th, 1895, to June 5th, 1896, the special staff engaged in the examination of the specimens sent in from the throats of diphtheria patients admitted to the hospitals of the Metropolitan Asylums Board have examined and reported upon 14,044 specimens, or an average of 44·3 per diem. In September, 1895, the first supply of antitoxic serum made in the laboratories was sent to the various hospitals under the Metropolitan Asylums Board. For the first few weeks it was difficult to meet the whole of the demands, as the serum was of comparatively low antitoxic power, and considerable doses had to be given in each case, in addition to which the number of horses given antitoxic serum was at that time only three. Within a short time, however, after Dr. Wood's method of preparation could be applied on a large scale, nine horses were prepared, and serum of much higher potency could be supplied in large quantities. After February no dose of serum containing less than 1000 normal units (Behring) was sent out, this dose being contained in 10 c.c. or less. Recently doses of 4000 units in 10 c.c. have been supplied for the treatment of more severe cases, especially those that come under treatment at a late period of the disease. During the year 9074 doses have been supplied.

The Secretary's report also contains a very concise account of the work done by Dr. Sidney Martin, Dr. Cartwright Wood, and Dr. Brodie, with the help of the Goldsmiths' research grant for the furtherance of the antitoxin treatment of diphtheria.

[1] Vide THE LANCET, July 18th, 1896, p. 201.

NORTH LONDON MEDICAL AND CHIRURGICAL SOCIETY.—The opening meeting of the session of this society was held on Oct. 8th, the President, Mr. J. Macready, being in the chair. Dr. Sidney Martin read a paper entitled "The Serum Treatment of Diphtheria." The treatment of the cases of diphtheria in University College Hospital during the years 1895 and 1896 (up to Sept. 22nd) formed the material upon which the paper was based. The paper is published in full in our current number.

BIRKENHEAD MEDICAL SOCIETY.—The annual meeting was held in the society's library on Oct. 9th, the President, Dr. A. C. E. Harris, J.P., being in the chair. The following office-bearers were elected for the ensuing year 1896–97, viz.:—President, Dr. R. Sydney Marsden, F.R.S. Edin.; Vice-president, Mr. Andrew Stewart; Secretary, Dr. Wm. Leask; Treasurer, Dr. Pinkerton; Librarian, Mr. S. Wilkinson; Council, Dr. J. Blood, Dr. E. Brien, Mr. Laird Pearson, Mr. Nazeby Harrington, and Mr. Blake-Campbell.

Obituary.

JOHN LANGDON HAYDON LANGDON-DOWN, M.D., F.R.C.P. LOND., J.P.,

CONSULTING PHYSICIAN TO THE LONDON HOSPITAL.

WE regret to have to record the death of Dr. Langdon-Down, who expired suddenly on Wednesday, Oct. 7th, at his country residence, Normansfield, Hampton Wick. His health had for some time been far from good and although his age was not advanced—he was sixty-seven—his state had for the past year given rise to some anxiety on the part of his numerous personal and professional friends. Dr. Langdon-Down was descended on his father's side from an Irish family, his father's great-grandfather having been Protestant Bishop of Derry, and on his mother's side from a Devonshire family, the Langdons, who about 200 years ago migrated from the north of Cornwall to the north of Devon and settled in that part of Devonshire which lies between Ilfracombe and Barnstaple. John Langdon-Down was born at Torpoint, in the county of Cornwall, and in the parish of Antony St. Jacobs, on Nov. 18th, 1828. After passing a year and a half in a dames' school he went at the age of five to a school kept by the daughters of the village surgeon. At the age of eight he was sent to a seminary kept by a Mr. Peters, and there had for a school-fellow Admiral Sir George Richards, F.R.S., subsequently hydrographer to the navy. Three and a half years later he was sent to the Devonport Classical and Mathematical School (where had been educated the late Bishop Colenso); this establishment was conducted on the lines of a public school. Here classics and mathematics were commenced. Every half year saw him at the top of his form. He had during his stay at school an excessive thirst for knowledge. At fourteen years of age he left Devonport and was apprenticed to his father, the village practitioner at Antony St. Jacobs, who was an apothecary before the Act of 1815. About this time a literary and scientific institution was opened in the town, in the formation of which he took an active part. He attended every lecture and devoured every instructive book. He often took part in the discussions, which led the vicar to present him with a copy of Arnott's physics, and this determined him to make science his profession. At the age of eighteen he went to London and entered the laboratory of the Pharmaceutical Society in Bloomsbury-square, where he studied botany under Dr. Anthony Todd Thompson, materia medica under Dr. Jonathan Pereira, and chemistry under Dr. George Fownes. He worked vigorously and was awarded the prize for organic chemistry; subsequently he acted as lecturer's assistant to Dr. Fownes and Professor Redwood, and intended to go to Giessen to continue his studies, but this hope was frustrated, a breakdown in health compelling him to return home. The next two or three years were spent in health-seeking, riding and walking over the wilds of Dartmoor. As he became stronger he gave lectures in chemistry at the Mechanics' Institutions at Devonport, Looe, and Liskeard, and frequently at Torpoint. He wrote an essay on the Wisdom of God as Displayed in the Compensation between the Animal and Vegetable Kingdoms. His essay obtained a prize offered by the President of the Stonehouse Institution and was publicly read and afterwards published. His father dying in 1848 he had to decide on his future course; his taste was for pure science—a taste which had been fostered by his having been thrown in contact with Professor Faraday while acting as his assistant at the time he discovered the dia-magnetism of the gases. At that time the remuneration for scientific chemistry was considered so precarious by his friends that he was urged to take up medicine as his profession, and with that view he entered the London Hospital as a student in October, 1853, where Dr. Cobb and Dr. Frampton were the physicians and Mr. Luke, Mr. Adams, and Mr. Curling the surgeons. Here he worked with great pleasure and enthusiasm, which were heightened by the influence of Dr. Andrew Clark, who had just entered on the duties of curator to the museum. He found in anatomy and physiology worlds of new knowledge which immediately led him captive, and for the pursuance of his studies in these directions he could not have had a better guide than Dr. W. B. Carpenter, who at that time was at the height of his fame. His studies in materia medica were continued under the superintendence of Dr. Jonathan Pereira, his old teacher at the Pharmaceutical Society, who held a similar appointment at the London Hospital. At the end of the first winter session he took the medal for chemistry and the medal for junior surgery. He matriculated in the University of London in June, 1854, and was awarded the prize for chemistry. At the end of the hospital summer session he took the medal for botany and one for materia medica. At the end of the winter session in 1855 he was awarded the senior medals for medicine and surgery, the medal for forensic medicine, and one for midwifery. In 1856 he passed the first M.B. examination in the University of London, taking the exhibition and gold medal for materia medica and honours in botany; he also secured the exhibition and gold medal in chemistry. At the hospital he was awarded the medal for clinical medicine. At this time he obtained the Membership of the Royal College of Surgeons of England and the licence of the Apothecaries' Company. He was then appointed medical tutor and resident accoucheur as well as lecturer on comparative anatomy at the London Hospital. He supported himself at this time on tutorial fees earned by preparing students for the higher examinations. In 1858 he became a candidate for the post of medical superintendent at the Asylum for Idiots at Earlswood. He received the appointment, retaining the lectureship on Comparative Anatomy at the London Hospital Medical College. The same year, before he commenced his duties at Earlswood, he obtained the M.B. degree and the gold medal for physiology at the University of London. In 1859 he became a Member of the Royal College of Physicians of London and M.D. of the University of London, and was appointed assistant physician to the London Hospital. In 1860 he consolidated his success and happiness by a most fortunate marriage. In 1868 he was elected a Fellow of the Royal College of Physicians of London, and in the same year left Earlswood after a work of ten years, which had established his reputation; he left in order to begin consulting practice in London and to carry out his idea of forming a home for the training of feeble-minded children of the upper classes, for whom at that time there was no suitable provision.

JOHN LANGDON HAYDON LANGDON-DOWN, M.D., F.R.C.P. LOND., CONSULTING PHYSICIAN TO THE LONDON HOSPITAL.

Dr. Langdon-Down's long experience at Earlswood rendered him especially qualified to speak with authority

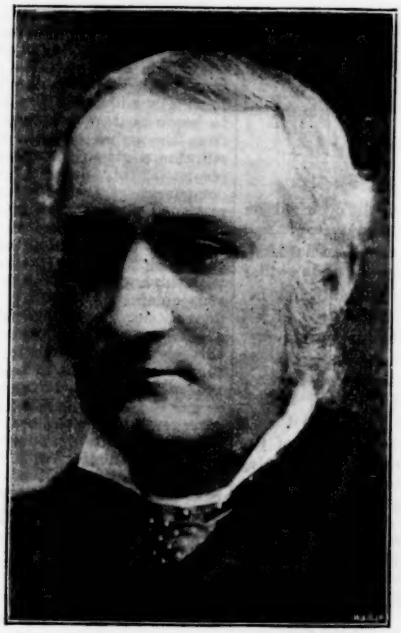
on all subjects having relation to the phenomena of idiocy, cretinism, and the like, and his observations concerning these states have been of very great value to the profession. In 1863 he published a valuable paper on "The Condition of the Mouth in Idiocy," wherein he presented many curious facts with regard to the dentition of feeble-minded children. His literary output was not great, although his communications to the numerous societies of which he was a member have always received a very considerable meed of recognition. His articles in "Quain's Dictionary of Medicine" on the subjects which he had specially made his own—namely, idiocy, cretinism, and dumbness—are admirably clear, concise, and full of original thought as well as abounding in evidences of a wide and ripe experience. At the commencement of the winter session of 1864 Dr. Langdon-Down delivered the Introductory Address at the London Hospital—a model of thoughtful encouragement to young men embarking on a new career. He spoke with the deepest feeling and with much beauty of expression on the more spiritual side of a medical man's life. In the course of his address he told of his personal experience.

"I remember the advice given me on leaving the village of my birth by a grey-headed man of the world. 'My lad,' said he, 'you take your aim; be sure you aim high enough.' That's the thing—aim high enough." He exhorted his hearers to aim at being "true physicians or true surgeons, and, above all, true Christian gentlemen." In this advice he gave, as he said, "the formula to aid his hearers in the solution of their problem, the secret that will command success, the talismanic charm which turns everything into gold, the potent spell at which all difficulties vanish. It is earnest and persistent work. Let it be supplemented by a gentle Christian life, terminated by a peaceful, hopeful death."

Dr. Langdon-Down was for many years physician to and lecturer in medicine at the London Hospital, and was up to the time of his death a member of the consulting staff at that institution. He was Vice-President of, and had been Lettsomian lecturer in medicine to, the Medical Society and Fellow of the Royal Medical and Chirurgical Society, Member of the Anthropological Institute, the Medico-Psychological Association, the British Medical Association, and the Neurological, Clinical, and Pathological Societies.

In 1884 Dr. Langdon-Down was made a justice of the peace for the counties of London and Middlesex and the Liberty of Westminster, and in 1889 was made an Alderman of the County Council of Middlesex. He possessed very considerable charm of manner, and his unvarying gentleness towards the unhappy creatures for whom he did so much gave him an extraordinary influence over them. His hospitality was on an extensive scale, and he frequently entertained large parties of professional friends at his beautiful home at Hampton Wick. On the occasion of the meeting of the British Medical Association in London, in August, 1895, a large number of members spent at his invitation a delightful afternoon at Normansfield, an entertainment which was perhaps the most universally appreciated of the functions of the meeting.

At the memorial service held at St. Thomas's, Portman-square, on Oct. 10th, previously to the cremation of the body at Woking, the Thames Valley Branch of the British Medical Association, of which Dr. Langdon-Down was the founder and former President, was represented by the President, Dr. G. E. Shuttleworth, and five other members.



WILLIAM MORRANT BAKER, F.R.C.S. ENG.,
LATE SURGEON TO ST. BARTHOLOMEW'S HOSPITAL.

WILLIAM MORRANT BAKER, F.R.C.S. ENG.,

LATE SURGEON TO ST BARTHOLOMEW'S HOSPITAL, ETC.

WILLIAM MORRANT BAKER was born at Andover on Oct. 20th, 1839. He was the second son of B. Russell Baker, a solicitor of that town. Early in life he evinced a taste for the medical profession, and after being educated at the Andover Grammar School under the Rev. John Harrison, M.A., and serving his apprenticeship to Mr. Payne, a practitioner of the locality, he entered at St. Bartholomew's Hospital in 1858, where he speedily attracted the attention of his teachers by the care bestowed upon his work and the earnestness and thoroughness with which he threw himself into his studies. In 1861 he was elected to a scholarship at the hospital, shortly after which he was selected by Dr. Charles West for the post of midwifery assistant, which he held until Dr. West's resignation in the following year. He did not hold the post of house surgeon, a circumstance which he never ceased to regret in later years, but passed on into the dissecting room, where his reputation as a careful teacher was soon assured. In 1867, on the resignation of Mr. Willett, he was elected to the post of warden of the College, and in 1869 succeeded the late Sir William Savory as Lecturer on General Anatomy and Physiology, becoming the editor of "Kirkes' Physiology," on the title page of which work his name is familiar to all students of that and the succeeding years, until his active connexion with the subject ceased in 1885. In due course he was elected assistant surgeon in 1871 and surgeon to St. Bartholomew's Hospital in 1882, a position which, owing to ill-health, he resigned in May, 1892. A month later he was elected a governor of the hospital, which office he continued to hold until his death. In April last he left London with his family for his country house at Nutbourne Manor, near Pulborough, Sussex, where for a time he seemed to revive under the influence of the country air; but in September last he was taken seriously ill, and though he rallied somewhat under the care of his old friend, Dr. John Harley, his condition became critical on Oct. 1st, when Mr. Foot of Pulborough attended in consultation with Dr. Harley. On Oct. 3rd he passed away peacefully, and was buried at West Chiltington on Oct. 9th in the presence of his family and a few old friends. He has left behind him a wife and six children. His eldest son is at present a student at St. Bartholomew's Hospital.

In addition to his appointments at St. Bartholomew's Hospital he was for some time surgeon to the Evelina Hospital for Sick Children and afterwards consulting surgeon. He had been examiner in general anatomy and physiology at the Royal College of Surgeons of England and had examined in surgery at the Universities of London and Durham and on the Court of the Royal College of Surgeons of England, in all of which posts his conscientious care and perfect fairness marked him out as a model examiner. As a writer on surgical subjects his work is distinguished by the care which he bestowed on it before he put pen to paper, and as a consequence whatever he wrote was so speedily amalgamated in the growing mass of surgical literature that his connexion with it was all too speedily lost. He early attracted the attention of Sir James (then Mr.) Paget by a paper in the *St. Bartholomew's Hospital Reports* on Tumours containing Fluid Blood and on the Inheritance of Cancer, and for some time acted as Sir James Paget's private assistant. His paper on Synovial Cysts and their connexion with Joint Disease is

an admirable example of what such papers should be, and his conclusions were at once accepted. Similar remarks apply to his description of "Aneurysms which do not Pulsate," "Diffuse Lipoma," and "Joint Disease in Connexion with Locomotor Ataxy." But he did not confine himself to professional literature; his spare moments were devoted to writing on the "Orders and Ordinances of the Hospital of Bartholomew the Lesse" and other analogous subjects, which he was all the better enabled to write about on account of the unrivalled collection of old prints and engravings of the hospital in its various stages of growth and development which he had collected and was always willing to display when occasion demanded.

The accompanying portrait will recall him to his friends far more than any mere description. Early in life he was a finely built, handsome man, fond of boxing as a pastime in his student days. He was a good change slow bowler, and has proved his prowess in more than one match of the staff *versus* the students. His interest in cricket he never lost, and he might sometimes be seen in later years watching the Gentlemen *v.* Players at Lord's. Consistent, kind almost to fault, thoughtful for others, his advice was often sought and often acted on, but he could be severe and administer stern reproof if occasion required. Few men took more trouble to get at the truth of any story of distress, and none was more ready to help when help was needed, always taking care not to let his right hand know what his left hand did.

ARTHUR CHARLES COPEMAN, M.B. LOND., M.R.C.S. ENG., L.S.A.,

HONORARY CANON OF NORWICH.

BY the death of Canon Copeman, which occurred on Sept 27th, the Church has lost a devoted servant and Norwich one of her most valued citizens. Born in 1824, trained for both a clerical and a medical career, and familiar with human life in many varied aspects, he spent his active years in energetically working for the good of his fellow men. In his young days his thoughts were first directed to medicine, which he studied at King's College to such good purpose that he not only became a Member of the Royal College of Surgeons of England and a Licentiate of the Society of Apothecaries in 1845, but gave a further proof of his ability by graduating as M.B. of the University of London in 1848. Had he continued an active member of the medical profession he would no doubt have met with much success, but another field of labour claimed him, for in 1851 he took holy orders, and was the same year appointed curate of St. Nicholas in Warwick. In 1854 Wisbech, where he was at that time curate, was so severely visited by cholera that from the middle of August to the middle of October there were 140 cases and fifty deaths, during which trying period Mr. Copeman remained faithfully at his post and was able to do much to relieve the sufferings and distress of his parishioners. Such devotion was naturally appreciated by the people, who, when he left Wisbech for Norwich in 1856, presented him with a handsome testimonial, consisting mainly of books and money. Mr. Copeman was vicar of St. Andrew's, Norwich, from 1856 to the time of his death; he also held several other ecclesiastical offices, including those of Rural Dean of Norwich (since 1870) and Honorary Canon of Norwich (since 1877). The funeral service was held in St. Andrew's Church, and the interment took place at the neighbouring parish of Coltishall, of which the deceased was at one time curate.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.—The deaths of the following eminent foreign medical men are announced:—Dr. Theodore Margo, Professor of Comparative Anatomy and Zoology in the University of Vienna, aged eighty years.—Dr. Rochard, formerly President of the Paris Academy of Medicine.—Dr. Jos von Kerschensteiner, President of the Superior Medical Council of Bavaria.—Dr. W. H. Ross, formerly Professor of Anatomy in the Mobile Medical College, Alabama.—Dr. Callender, Professor of Neurology in the Vanderbilt University, Nashville.—Dr. Elsworth F. Smith, Emeritus Professor of Pathological Anatomy in the St. Louis Medical College.

"GLUCOSIDE CONSTITUTION OF PROTEID MATTER."

DR. PAVY, in his paper on the Glucoside Constitution of Proteid Matter, read at the Physiological Section of the meeting of the British Association for the Advancement of Science recently held at Liverpool, reviewed the present position of the question, which is, he observed, of fundamental importance to physiology. Glucosides, he remarked, are bodies which, when acted upon by ferments, by acids or alkalies, and even by water at an elevated temperature, undergo cleavage or disruption, a carbohydrate being one of the products. Such bodies have long been known to chemists in the vegetable kingdom. Salicin is an example of a very simple glucoside. It contains only the three elements—carbon, hydrogen, and oxygen. A more complex glucoside is amygdalin, which contains the four elements—carbon, hydrogen, oxygen, and nitrogen. Myrosin, contained in black mustard seed, affords an example of a glucoside in which complexity has gone a step further, for it contains sulphur in addition to the four elements just mentioned. Of a much greater degree of complexity are certain bodies which form the basis of living matter. Thus mucin, which is found not only in mucus, but is a constituent of connective tissue, was shown not long ago by Landwehr to be in constitution a glucoside. He (Dr. Pavy) in 1894[1] advanced evidence to prove that proteid matter generally, whether derived from the animal or the vegetable kingdom, was in constitution a glucoside. He was led to this conclusion by the results of his quantitative examinations of the various components of the body for glycogen. In making the estimation of glycogen the process followed for many years was to dissolve the substance by boiling with a solution of potash, to pour the resulting solution into alcohol, to collect the precipitate thus produced, to convert it into glucose with sulphuric acid, and to estimate the amount of glucose thus obtained by titrating with the copper test. The product obtained by boiling with potash and precipitating with alcohol was at first looked upon by him as glycogen, but this view became untenable when it was ascertained by further experiments that the quantity yielded varied when the length of time during which the potash was caused to act, or the strength of the potash solution was varied. Had glycogen been the sole source of the product, treatment with potash should have produced no effect beyond dissolving the nitrogenous matter with which it was associated. The actual quantity of glucose-yielding substance should not have been increased by varying the strength of the alkali or the length of time for which it was permitted to act. The conclusion was inevitable that there must be something beyond glycogen, and the only feasible conclusion was that an amylose carbohydrate, which was not glycogen, was liberated by a cleavage of the proteid molecule produced by the action of the alkali. Purified egg albumen was chosen as a convenient proteid for further experiment. By the action on it of potash an amylose carbohydrate corresponding to Landwehr's "animal gum" is obtained and can be converted by sulphuric acid into a body giving the various characteristic reactions of sugar. It was found, further, that sugar is yielded by the direct action of sulphuric acid on egg albumen and that the same occurs as a result of pepsin digestion. Details on these points were published by him (Dr. Pavy) in 1894,[2] and subsequently[3] analytical evidence was supplied by Mr. Ling which afforded decisive proof that the osazone derived from the cleavage product was a sugar osazone. He (Dr. Pavy) stated that since the publication of these results he had found that Schützenberger upwards of twenty years ago had published analytical experiments which confirmed his own results. This distinguished chemist in recounting[4] his study of the products of the breaking up of egg albumen by strong chemical agents mentioned that sulphuric acid caused the appearance of a non-nitrogenous body which reduced Fehling's solution energetically, was precipitated by ammoniated acetate of lead solution and, to quote his actual words, "parait être de la glucose ou un corps analogue." Schützenberger found, also, that by exposing egg albumen to baryta water at 100° C.

[1] Physiology of the Carbohydrates, p. 27 et seq.
[2] Loc. cit. [3] Epicriticism, 1895.
[4] Bulletin de la Société Chimique de Paris, vol. xxiii., 1875, p. 161.

for 120 hours he obtained a non-nitrogenous body, insoluble in alcohol, precipitable by ammoniated acetate of lead, not reducing Fehling's solution, but transformable by boiling with sulphuric acid into a body which did. Its elementary composition was found to agree very closely with that of dextrin, with which, Schützenberger remarks, it presents the greatest analogy. Baryta accomplished in 120 hours what is accomplished by potash in half an hour. Schützenberger remarked that there is evidently a connexion between the body obtained in these experiments with baryta and the cupric oxide reducing substance obtained in the experiments with sulphuric acid. He (Dr. Pavy) pointed out that though his own experiments were started from a point differing totally from the purely chemical investigations of Schützenberger the results were strictly comformable.

Schützenberger's results, however, had hitherto received little attention beyond an incidental mention in books of the bare facts he had observed. That proteid matter, Dr. Pavy continued, should be a glucoside in constitution, was, however, a point of the deepest physiological interest, and one which harmonised with facts which could be adduced as to its formation. Thus Pasteur's experiment on the growth of yeast afforded irrefutable evidence that carbohydrate matter is used up in the construction of proteid. He showed that yeast cells multiplied freely in a medium consisting of sugar, ammonium tartrate, the ash of yeast, and water. The multiplication of the yeast cells implied a growth of cell protoplasm and a corresponding formation of proteid matter. Moreover, in the solution the ammonium tartrate may be replaced by ammonium nitrate, and then absolutely the only source for the carbon of the proteid is the sugar. Carbohydrate matter thus shown to be incorporated in the proteid during its construction could, as he (Dr. Pavy) had shown, be cleaved off from it again by chemical and ferment action. He remarked that we were thus brought to this position—the carbohydrate of food is in part applied to the construction of proteid matter and is in this locked-up condition conveyed to the tissues to supply the needs of their growth and renovation. From the proteid of the tissues it may be cleaved off by ferment action and this is probably the source of the free carbohydrate found to be present to a certain extent in the various components of the body. There could be no doubt that in the grave form of diabetes the sugar eliminated is derived not only from the food but also from the tissues. The glucoside constitution of proteid matter fitted in with this and afforded a ready explanation of the observed facts, all that it was necessary to assume being the existence in diabetes of the requisite ferment agency.

THE MANCHESTER SOCIETY OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND AND THE REPRESENTATION OF MEMBERS OF THE COLLEGE ON THE COUNCIL.

WE are requested by the Committee of the Association of Fellows to publish the following reply to Dr. James Hardie's article on "The Council of the Royal College of Surgeons," which was recently sent round with the stamp of approval by the Executive Committee of the Manchester Society of Fellows.

"1. Mr. Hardie states that in the Charter of 1800 'the duty of the promotion and encouragement of the study and practice of the art and science of surgery was entrusted to a body which has had various names and is now known as the Council of the College.' This is erroneous and misleading. The Charter of 1800 incorporated the members of the late company and some others who were authorised to practise the art and science of surgery for the due promotion and encouragement of the study and practice of the said art and science under the name of the Royal College of Surgeons in London, with perpetual succession and a common seal.

"2. Mr. Hardie objects to the use of the word 'representative' in connexion with Members of the Council because the word is not used in the Charter of 1843. In the ordinary sense of the word Members elected by a constituency represent that constituency.

"3. Mr. Hardie avers: 'There are no interests of Fellows apart from those of Members, nor have the latter any apart from those of the former.' Although some of the Fellows are general practitioners a considerable number are consultants, and the Members generally have interests apart from, though not necessarily antagonistic to, those of the Fellows arising out of their different spheres of practice.

"4. Mr. Hardie says; 'The Council is an academic body, with objects apart from those of the profession generally.' The Council is not, and ought not to be, only an academic body. The College is a great professional institution—in reality, a guild; and the Council has disciplinary and other functions besides the academic in which the Members ought to have a voice.

"5. Mr. Hardie asks for proof that the Council has failed to fulfil its duties. That the Council properly fulfils its academic duties is not denied, but we do complain that the Council has been averse to perform its guild duties and has in certain respects overlooked and even run counter to the interests of the Members. For instance, had the Members been consulted in regard to the conjoint scheme and their opinion acted upon there can be little doubt that the Apothecaries' Society would have been included in the scheme and the evil of competing examining bodies in London avoided. Other instances might be given, but we will only add here that the reformed system of election to the Council and other improvements have been the result, not of volitional, but of reflex, action on the part of the Council.

"6. Mr. Hardie asserts that the consideration by the Council of topics relating to the professional interests of the Members of the College would be 'lowering' to the Council. It is greatly to be regretted that there is any member of the Council who has so little sympathy with the practitioners of surgery; but apart from that it may be observed that if the daily practice of surgery in virtue of diplomas granted under the seal of the College is not 'lowering,' topics arising out of that daily practice cannot be 'lowering' for the Council to consider. To lessen the struggles and difficulties of surgical practice ought to be a congenial task for the Council of a great surgical institution.

"7. Mr. Hardie says that 'taxation means representation,' and any argument for the representation of the Members founded on this dictum is the veriest claptrap. Taxation has never been said to 'mean representation,' though it has been regarded as a legitimate claim to it, and this view has never before been described as 'claptrap.' That the Members' fees form a great part of the income of the College has been considered in the judgment of many to give the Members a just claim to a voice in its management, and it would at least be good policy in the Council to conciliate a body upon whose loyalty and goodwill the prosperity of the College so intimately depends.

"8. Mr. Hardie says that he does not believe there is any widespread desire on the part of the Members of the College to be represented on its Council. Our own belief is different, and it is at least certain that until the desire is satisfied no progress is possible for the College, because this would involve a fresh charter, which would again be opposed, and, no doubt, again successfully opposed by the dissatisfied Members.

"9. Mr. Hardie says: 'There is no extensive knowledge of College politics either among Members or Fellows.' This we admit, and possibly the circulation of the reprint may be regarded as a symptom of it.

"10. Mr. Hardie intimates that the Fellowship is sought for because it confers a vote for, and a right after a certain period of eligibility to, the Council. The chief attraction of the Fellowship is not the vote or the eligibility for the Council, but the fact that it qualifies for surgical appointments and gives surgical position. No one would submit to a prolonged curriculum and severe examination and pay heavy fees in order to get a vote for the Council.

"11. The idea that the promotion of the science and art of surgery will suffer by the Council being brought into more intimate relations with the great bulk of those who practise it seems to us to be absurd."

MUNIFICENCE.—On Monday last the new wing of the Derbyshire Royal Infirmary was opened for the reception of patients and will contain forty-two beds. It has been erected by Mr. Walter Evans at a cost of £12,000 as a memorial of his late wife, and will be known as the Susan Evans' Wing.

ELECTION OF DIRECT REPRESENTATIVES TO THE GENERAL MEDICAL COUNCIL.

THE following correspondence has been sent to us for publication:—

"15, Eccles New-road, Salford, Manchester, Oct. 9th, 1896.

"DEAR SIR,—The following statements are being made in this district with regard to you:—

"1. That you are not now in general practice and that, consequently, your interests are not those of the general practitioners with regard to the midwives question.

"2. That you are not very earnest about increased direct representation for the profession in the General Medical Council, and that your speech at the Council was only half-hearted with regard to that matter.

"There will be held next Tuesday here a meeting of the local profession, and if you would like to make any reply to the above assertions I shall be glad to lay it before the meeting. "Yours very truly,

"R. H. WOLSTENHOLME, Secretary.

"J. G. Glover, M.D."

"25, Highbury-place, London, N., Oct. 10th, 1896.

"DEAR SIR,—I am very much obliged to you for your letter and for directing my attention to statements which are meant to injure my candidature—statements which a little inquiry by those who made them would have shown to be false. I have noticed the tendency in a few quarters or among a few groups of persons to hint that I have opinions which I do not express and am deficient in sympathy with my fellow general practitioners. No representation could be more unjust. I am quite content to appeal from such misrepresentations to the broad and generous judgment of the profession in my favour which was shown at the last election in 8374 votes and of which I continue to receive much evidence. I mean by this, not that all my supporters have agreed with me in every word I have spoken or every vote I have given, but that in their opinion I have acted honestly and, on the whole, reasonably, in a way to advance the principle of direct representation and those obvious reforms and amendments of law which are needed alike in the interest of the profession and of the public. It is on this broad judgment of the profession alone that every candidate should rely who hopes to have any influence for good in the Medical Council. But I am not the less pleased to reply to the two specific statements referred to in your letter.

"1. In reply to the first statement I have to say that I am now in general practice, as I have always been. Though I like to think of the profession as one and indivisible, and that the direct representative represents all registered practitioners, I am deeply impressed with the responsibilities of general practice, with the arduous nature of the life of general practitioners, of whom the State through the medical authorities exacts so much and to whom it gives so little in return. The carrying out of my views in regard to midwives would not deprive a practitioner of one of the cases he now attends. The opinion I have always held, and which is now held by every candidate in one form or another, is that means must be found to save poor women from the risk to health and life involved in being attended by so-called midwives ignorant of the very first principles of puerperal safety. I greatly misunderstand the medical profession if it should prove that in giving honest expression to this opinion I have misrepresented the majority of my brethren. I am as much determined as any other candidate that any steps taken for the protection of poor women shall be accompanied with securities for the protection of the medical profession. The training I advocate for midwives or midwifery nurses is of the most modest character that cannot by any ingenuity be called a medical one or be supposed to confer medical rights.

"I leave all fair men to say how far the statements you kindly direct my attention to are warranted.

"2. The second statement to which you refer is as baseless as the first—viz., that I am not very earnest about increased direct representation. I have acted and spoken in the Medical Council in favour of such increase as my colleagues in the direct representation have acted and spoken. Not only so, but I never lose an opportunity of advocating the principle of direct representation in the medical corporations or of saying to my friends who object to it that the refusal of it to Members is, in my judgment, alike unreasonable and impolitic.

"I have, in conclusion, to ask a double favour of you. First, that you will be good enough to read to the meeting at Salford your letter and my replies; and, secondly, that you will give me leave to publish this correspondence. Thanking you for your kindness in writing me,

"I remain, yours very truly,

"JAMES GREY GLOVER.

"R. H. Wolstenholme, Esq., L.R.C.P. Ed., M.R.C.S. Eng."

IN support of the candidature of Dr. Glover, Dr. Woodcock, and Dr. Drage a meeting of practitioners in the north-west district of London will be held at the residence of Dr. Ford Anderson, 41, Belsize-park, N.W., on Wednesday next, Oct. 21st, at 5 P.M.

Mr. James Savage and Dr. Herbert Alderson, honorary secretaries to Dr. Alderson's election committee, ask us to state that a meeting of Dr. Alderson's supporters will be held at 4 P.M., on Tuesday, Oct. 20th, at 1, Osnaburgh-terrace, Regent's-park, by kind permission of Mr. J. W. Mason, to report progress of his candidature, and to consider what further steps shall be taken to ensure the election of Dr. Alderson as one of the direct members in the General Medical Council and to hear an address.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Cardiff Urban District.—In the first quarterly report for 1896 Dr. Edward Walford furnishes an interesting account of the prevalence of small-pox in Cardiff during the quarter in question. The outbreak was first recognised in the Cardiff workhouse, where the disease was probably imported by tramps, and subsequently small-pox broke out in the town itself. It is somewhat doubtful as to what was the source of the outbreak in Cardiff, but it would seem difficult to exonerate Gloucester from having had at least some influence in the matter. Dr. Walford states that the guardians did all in their power to enforce the Vaccination Acts, but, as the guardians did not see their way to adopt the excellent suggestion that more vaccination officers should be temporarily appointed, Dr. Walford instructed the sanitary inspectors to inquire as to vaccination in houses visited by them, and, where necessary, to give information to the vaccination officer. The number of cases is, as Dr. Walford points out, too small to place much reliance upon, but as far as they go they teach the usual lessons—i.e.: (1) no vaccinated children under ten years were attacked; (2) no re-vaccinated adults were attacked; (3) the fatality rate among the vaccinated was 3·4 per cent. and among the unvaccinated 16·4 per cent.; and (4) none of the hospital staff who had been re-vaccinated contracted the disease.

St. Olave's Sanitary District.—Dr. W. A. Bond, in his annual report for 1895, advises that hospital accommodation should be provided for such cases of measles as cannot be properly isolated or nursed at home, and he considers that the disease should be made notifiable both by the head of the family and by the medical attendant. In a special report presented to the St. Olave's Vestry on this subject Dr. Bond pointed out that during 1894 there were in London 3292 deaths from measles as against 964 from scarlet fever. Dr. Bond thinks that one of the chief advantages of notification of measles would be the exclusion of children living in infected houses from school. It is, as Dr. Bond observes, most important to perfect the machinery by which the spread of infection by school agency may be controlled without resorting to school closure. There were three cases of anthrax contracted in St. Olave's during 1895, but by prompt operative procedure at Guy's Hospital the lives of two were saved. Nearly eight tons of tinned meat from Brisbane, Australia, were condemned by Dr. Bond, who very ingeniously divided the tins by their exterior appearance into three classes, the "bad" (obviously "blown" tins), the "doubtful," and the "good." A percentage of the apparently good tins being opened and found to be sound

the owner consented to Dr. Bond's proposal to pass the remaining apparently "good" ones and to destroy the "bad" and "doubtful" ones.

Southampton Urban District.—This district has been recently increased materially in area and population by borough extension, and in 1895 the population was estimated by Mr. Wellesley Harris at 94,093. This fact accentuates, as is pointed out in the report before us, the necessity for adequate isolation accommodation, and we are glad to be able to record that, after numerous postponements, ten acres of land have now been provisionally chosen for this purpose. Mr. Harris, in discussing the objections to fever hospitals, states that the experience of Southampton has shown that whenever a case of small-pox introduced by an incoming ship was isolated in West Quay fresh cases occurred within the vicinity of the hospital within fourteen or twenty days of its arrival, and that these cases usually occurred in the track of the prevailing wind from the hospital. He adds that since cases of this disease have been isolated in the floating sanatorium, which is about three-quarters of a mile from the shore, there has not been a single instance of the spread of the disease to other persons. In respect of other infectious diseases Mr. Harris rightly adds that no sufficient evidence has yet been adduced that their isolation, even in a thickly populated district, has ever led to the diffusion of these diseases among the surroundings of the hospital. Mr. Harris in his report furnishes also an interesting chart showing the daily variation of temperature inside an iron hospital building.

Scarborough Urban Sanitary District.—Referring in his annual report to the high mortality amongst illegitimate children, Dr. Herbert Littlejohn suggests that "some form of State regulation, not of vice, but of its results, might be attempted, that the State should stand *in loco parentis* to those unfortunate children who certainly have not themselves to blame for either their existence or its premature termination." Dr. Littlejohn apparently does not consider that much advantage is to be derived from the notification of puerperal fever, but it would seem to us that the information which may at times be afforded by this agency is a valuable weapon in the hands of a medical officer of health for controlling in at least some degree the movements of an infected midwife.

Lanark County District.—Dr. John T. Wilson, in the course of observations on the dairies and cowsheds in this county, reports that a large dairy farmer in the district has tested his cows by means of tuberculin, and it is extremely interesting to note that although the farmer purchased only the best class of cows he found that of 200 having an age of from five to six years fully 30 per cent. reacted to the tuberculin test. This very enlightened and enterprising dairy farmer now purchases only animals which have not reacted to the test. We are very glad that Dr. Wilson has embodied this information in his annual report. There is in the report before us an interesting account of the pollution of streams by coal dross washings, and it is a matter of congratulation that good preventive work in this direction has been performed during the year.

Croydon Rural District.—Dr. Darra Mair, in the course of a very thorough report, records an outbreak of diphtheria which was apparently caused by a secondhand carpet, which had been rolled up for some nine months. Unfortunately, the house from which the carpet had been procured could not be ascertained. In the effluent of the Croydon sewage farm there flourish certain watercress beds, and the rural district council had determined to have a bacteriological examination made of the watercress, and presumably also of the effluent, as they had under consideration the possibility of enteric fever being thus conveyed. The Croydon Corporation have, however, decided to prohibit for the future the growing of watercress in the effluent. Dr. Mair reports that the practice with regard to diphtheria in his district is to prove the absence of the bacillus of the disease by means of bacteriological examination, and that such proceedings have necessitated isolation for much longer periods than heretofore. Dr. Mair remarks, and we are by no means surprised to hear it, that these examinations have at times led to considerable difficulty and anxiety both to the medical officer of health and to the medical practitioner. The difficulty of persuading parents to comply with the necessities of the bacteriological situation is very great. During the year one of the schools in the district was found to be in a very insanitary condition owing to defective drains, and the Education Department advised the School Board to request a report from Dr. Mair. Upon Dr. Mair presenting his report the Education Department requested the board to prepare proper plans and to submit them to Dr. Mair for his approval. A very heavy responsibility was thus thrown upon the medical officer of health, which was further accentuated by the fact that he considered it necessary to have the school closed in order to carry out the alterations forthwith.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns 6264 births and 3477 deaths were registered during the week ending Oct. 10th. The annual rate of mortality in these towns, which had increased in the three preceding weeks from 15·1 to 15·7 per 1000, further rose last week to 16·7. In London the rate was 16·2 per 1000, while it averaged 17·0 in the thirty-two provincial towns. The lowest rates in these towns were 10·6 in Norwich, 11·5 in Croydon, 12·2 in Cardiff, and 12·3 in Leicester; the highest rates were 18·8 in Sheffield, 19·6 in Liverpool, 21·0 in Salford and in Hull, and 21·5 in Manchester and in Sunderland. The 3477 deaths included 361 which were referred to the principal zymotic diseases, against 406 and 385 in the two preceding weeks; of these, 82 resulted from diphtheria, 80 from diarrhœa 58 from scarlet fever, 57 from measles, 49 from "fever" (principally enteric), 35 from whooping-cough, and not one from small-pox. The lowest death-rates from these diseases were recorded in Cardiff, Brighton, Bolton, and Huddersfield; and the highest rates in Sunderland, Sheffield, Hull, and Salford. The greatest mortality from measles occurred in Halifax, Sheffield, Gateshead, Hull, and Nottingham; from scarlet fever in Birkenhead; from "fever" in Sunderland; and from diarrhœa in Swansea, Sunderland, Salford, and Blackburn. The mortality from whooping-cough showed no marked excess in any of the large towns. The 82 deaths from diphtheria included 52 in London, 6 in Birmingham, 5 in Liverpool, 4 in West Ham, and 3 in Salford. No fatal case of small-pox was registered in any of the thirty-three large towns. There were 4 cases of small-pox under treatment in the Metropolitan Asylum Hospitals on Saturday last, the 10th inst., against numbers declining from 16 to 3 at the end of the five preceding weeks; one new case was admitted during the week. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 4105, against numbers increasing from 3370 to 4020 at the end of the eight preceding weeks; 424 new cases were admitted during the week, against 453, 466, and 454 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 166 and 172 in the two preceding weeks, further rose to 218 last week, but were 36 below the corrected average number. The causes of 58, or 1·7 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bristol, Bradford, Leeds, Hull, and in eleven other smaller towns; the largest proportions of uncertified deaths were registered in Liverpool, Preston, Sheffield, and Newcastle-upon-Tyne.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 14·4 and 18·1 per 1000 in the two preceding weeks, declined again to 17·7 during the week ending Oct. 10th, but was 1·0 per 1000 above the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 11·9 Leith and 13·5 in Edinburgh to 19·9 in Aberdeen and 20·3 in Dundee. The 517 deaths in these towns included 25 which were referred to diarrhœa, 15 to measles, 7 to whooping-cough, 5 to scarlet fever, 3 to diphtheria, and 2 to "fever." In all, 57 deaths resulted from these principal zymotic diseases, against 77 and 79 in the two preceding weeks. These 57 deaths were equal to an annual rate of 2·0 per 1000, which was 0·3 above the mean rate last week from the same diseases in the thirty-three large English towns. The 25 fatal cases of diarrhœa showed a further decline from the numbers recorded in recent weeks, and included 16 in Glasgow. The deaths referred to measles, which

had increased from 7 to 10 in the three preceding weeks further rose to 15 last week, of which 14 occurred in Glasgow. The 7 fatal cases of whooping-cough were within two of the number returned in the preceding week, and were all registered in Glasgow. The deaths from scarlet fever, which had declined from 10 to 6 in the three preceding weeks, further fell to 5 last week, of which 3 occurred in Glasgow and 2 in Aberdeen. The fatal cases of diphtheria, which had been 5 and 9 in the two preceding weeks, declined to 3 last week. The deaths referred to diseases of the respiratory organs in these towns, which had been 45 and 76 in the two preceding weeks, further rose to 87 last week, but were 10 below the number in the corresponding period of last year. The causes of 31, or 6 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 15·5 and 20·1 per 1000 in the two preceding weeks, further rose to 28·6 during the week ending Oct. 10th. During the past four weeks the death-rate in the city has averaged 20·3 per 1000, the rate during the same period being 15·2 in London and 14·5 in Edinburgh. The 158 deaths registered in Dublin during the week under notice showed an increase of 23 upon the number in the preceding week, and included 21 which were referred to the principal zymotic diseases, against 17 and 14 in the two preceding weeks; of these, 9 resulted from diarrhœa, 6 from "fever," 4 from scarlet fever, 2 from whooping-cough, but not one either from small-pox, measles, or diphtheria. These 21 deaths were equal to an annual rate of 3·1 per 1000, the zymotic death-rate during the same period being 1·8 in London and 0·4 in Edinburgh. The fatal cases of diarrhœa, which had been 8 and 3 in the two preceding weeks, rose again to 9 last week. The deaths referred to different forms of "fever," which had increased from 2 to 6 in the three preceding weeks, were again 6 last week. The fatal cases of scarlet fever, which had been 4 and 3 in the two preceding weeks, were 4 last week. The 158 deaths in Dublin last week included 25 of infants under one year of age, and 40 of persons aged upwards of sixty years; the deaths both of infants and of elderly persons showed a further increase upon those recorded in recent weeks. Nine inquest cases and 4 deaths from violence were registered; and 62, or more than a third, of the deaths occurred in public institutions. The causes of 7, or more than 4 per cent., of the deaths in the city last week were not certified.

THE SERVICES.

ARMY MEDICAL STAFF.

SURGEON-CAPTAIN J. DONALDSON has embarked at Southampton for Malta. Surgeon-Captain H. A. Cummins has been placed under orders to embark for Bermuda. Surgeon-Captain E. A. Burnside has proceeded to the Scottish District for duty. Surgeon-Colonel M. Cogan, P.M.O., Belfast District, has received notice to be in readiness for service in India.

Surgeon-Captain Charles Christie Fleming, M.B., is seconded for service with the Egyptian Army.

INDIA AND THE INDIAN MEDICAL SERVICES.

The following officers, whose tour of foreign service will expire during the trooping season of 1896–97, will proceed to England for duty with troops on the homeward voyages. *Punjab Command:* Surgeon-Majors E. North, B. T. McCreery, A. P. O'Connor, G. H. Sylvester, A. S. Rose, and R. E. R. Morse; Surgeon-Captains H. A. Haines, S. N. Cardozo, H. E. Cree, W. H. Starr, H. L. G. Chevers, G. F. Alexander, W. B. Leishman, J. Thomson, C. W. Reilly, H. S. Peeke, T. Birt, A. W. Bewley, and C. A. Stone. *Bengal Command:* Surgeon-Lieutenant-Colonels R. W. Mapleton and J. C. Dorman; Surgeon-Majors C. Seymour, J. G. Harwood, H. L. E. White, A. H. Burlton, D. Wardrop, J. M. Jones, R. L. Love, R. Jennings, J. Carmichael, and S. F. Lougheed; Surgeon-Captains R. H. Clement, W. H. Horrocks, E. C. Freeman, I. Paterson, W. T. Mould, and S. G. Moores. *Bombay Command:* Surgeon-Majors K. S. Wallis, F. A. Harris, and A. V. Lane; Surgeon-Captains A. A. Sutton, V. H. W. Davoren, R. J. Copeland, and J. Girvin. Surgeon-Major J. I. P. Doyle, Brigade-Surgeon-Lieutenant-Colonel M. D. O'Connell, M.D., and Surgeon-Major J. R. Mallins, M.B., will soon embark for Bombay. Surgeon-Major R. C. K. Laffan has been warned to be in readiness to embark for India. Surgeon-Lieutenant-Colonel G. D. Bourke has embarked for India. Surgeon-Captain R. J. Copeland, A.M.S., has passed the Lower Standard examination in Persian. Brigade-Surgeon-Lieutenant-Colonel Albert Baird Seaman is permitted to retire from the service. Surgeon-Major MacNeece, A.M.S., has been transferred from the Poona District to the Aden District. The services of Surgeon-Captain J. Chaytor White, late Officiating Civil Surgeon, Jaunpur, are replaced at the disposal of the Military Department. Surgeon-Major H. C. Hudson of the 16th Bengal Cavalry is appointed to officiate as Civil Surgeon of Mooltan, in addition to his own duties. The services of Surgeon-Captain W. C. Sprague, M.D., are placed temporarily at the disposal of the Government of Bombay. Surgeon-Captain C. Donovan, M.D., is appointed to act as District Medical and Sanitary Officer, South Canara, and Superintendent of Gaol, Mangalore. Surgeon-Major H. Thomson, M.B., is appointed to act as District Medical and Sanitary Officer, Ganjam, and Superintendent of Gaol, Berhampur. Surgeon-Captain W. H. B. Robinson of the 34th Bengal Infantry is appointed to officiate temporarily as Agency Surgeon in Ulwar. Dr. W. Forsyth, Health Officer of the Port of Calcutta, is appointed to act, in addition to his own duties, as Superintendent of Emigration and Protector of Emigrants, Calcutta, during the absence, on leave, of Dr. R. Macleod. Surgeon-Major J. L. Van Geyzel, M.B., is appointed to be Lecturer on Experimental Physics; Mr. A. G. Bourne, D.Sc., F.R.S., is appointed to be Lecturer on Comparative Anatomy, and Senior Assistant Surgeon R. Hollingsworth is appointed to be Lecturer on Botany; the above appointments are made for the ensuing winter session of the Medical College, Madras. Surgeon-Captain S. H. Henderson, is appointed to be Surgeon-Captain in the Agra Volunteer Rifle Corps to complete the establishment.

NAVAL MEDICAL SERVICE.

In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Fleet-Surgeon Richard Alfred Mowll, M.D., has been placed on the Retired List of his rank at his own request.

ARMY MEDICAL RESERVE OF OFFICERS.

The undermentioned officers have been appointed to be Surgeon-Captains:—Surgeon-Lieutenant John H. Stacy; Surgeon-Captain James Harris Garcia Whiteford, M.B., Clyde Division, Submarine Miners, Royal Engineers (Volunteers); and Surgeon-Lieutenant Thomas W. J. Allen, 1st Lincolnshire Volunteer Artillery (Western Division Royal Artillery). The undermentioned officers have been appointed to be Surgeon-Lieutenants:—Surgeon-Lieutenant Lewis Walter Pockett, 1st Lincolnshire Volunteer Artillery (Western Division) Royal Artillery; and Surgeon-Lieutenant Mark Ringwood Rich, 2nd Tower Hamlets Volunteer Rifle Corps.

VOLUNTEER CORPS.

Artillery: 1st Volunteer Battalion the Duke of Cornwall's (Western Division, Royal Artillery): Surgeon-Lieutenant T. St. P. Tuckey, M.B., resigns his commission. 1st Fifeshire: Honorary Assistant Surgeon E. A. Watson, M.D., retires. *Rifle:* 1st Volunteer Battalion the East Yorkshire Regiment: Surgeon-Major H. Thompson to be Surgeon-Lieutenant-Colonel.

THE MADAGASCAR EXPEDITION.

In augmentation of the peace establishment (of which the personnel and equipment were thus about doubled) the French medical authorities were able to mobilise the following material for service in the Madagascar expedition:—Two movable ambulances of the No. 3 Algerian type; four field hospitals of 250 beds each; one base hospital for 500 patients, with disinfecting apparatus; one sanatorium for 500 patients, with disinfecting apparatus; and sixteen movable ambulances of the Tonkin type. In addition to the above, by arrangement with the Navy department, a transport (first the *Shamrock* and afterwards the *Vinh Long*) was stationed at Majunga as a hospital ship, making up about 350 beds. The extra personnel told off consisted of 70 medical

officers (50 belonging to the army and 20 to the navy), 8 apothecaries, and 22 administrative officers, with 9 chaplains (8 Roman Catholics and 1 Protestant), and 14 sisters of the Saint Joseph de Cluny order. In this way it became possible, in addition to telling off 2 surgeons for each of the 13 infantry battalions, to post 5 medical officers to each ambulance and field hospital, 6 to the base hospital, and 6 to the sanatorium. The sanitary material included the following appliances, &c.: 3 apparatuses for sterilising water (capacity of one 20,000 litres, of each of the others 10,000 litres); 5600 stretchers; 500 bedsteads, with linen and mosquito nets; 2500 legged-stretchers (Strauss' model), with linen and mosquito nets; 20,000 dressing packets, and a very large supply of drugs; 10 Tollet tents; 27 modified tortoise tents; 37 conical tents; and 62 portable huts of the Wehrlin-Espitalier pattern. The whole, without reckoning the Tonkin ambulances, afforded accommodation for about 2500 patients—that is to say, one-sixth of the entire expeditionary force. Needless to add that the medical corps from first to last sustained its high reputation for zeal and devotion, but unfortunately its ranks were sadly thinned by death and disease. The death-roll included 4 medical officers (2 military and 2 naval), 2 administrative officers and 2 chaplains. The invalids, of whom several are still incapacitated, were also very numerous. During the short time the operations lasted it was found necessary to replace 27 medical officers, 8 administrative officers, and several chaplains, and also 285 orderlies, or about half as many as originally started. The casualties (if any) among the sisters are not mentioned in the report published in *La Semaine Médicale*.

Madagascar promises to turn out an unfortunately troublesome acquisition for the French. Its conquest was dearly purchased, the expedition sent from France for the purpose having caused a large expenditure of both life and money. The country was a very difficult one for a campaign, the climate hot and malarious, and the transport, sanitary, and medical arrangements were very inadequate for an undertaking of the kind. Probably on no occasion have the sterling qualities of the French soldier been more conspicuously manifested than in the late Madagascar expedition. The soldiers comprising the force exhibited an unusual amount of patient endurance, gallantry and discipline under the most trying circumstances. At the present time Madagascar appears to be in a state of rebellion, and the situation in the country districts is growing worse instead of better. It was generally hoped that the arrival of General Gallieni would lead to an improved condition of affairs, but such has not been the case. It is the general opinion that there will have to be a large increase of the French force, almost amounting to a fresh expedition, to quell the rebellion, for large bands of rebels and marauders are roaming over the country attacking and burning down mission stations, looting and sometimes murdering the more quiet and well-disposed people. Detachments of French troops are sent in pursuit of these bands, which usually disperse before the arrival of the soldiers, only to return again later on to extend their operations elsewhere. On one occasion lately a body of French troops made a forced march to the defence of a besieged mission station, but the armed mob of besiegers fled on their approach and will, no doubt, soon be heard of elsewhere. The French find the work very arduous and harassing, and there is still a good deal of sickness and inefficiency in the force, attributable to the nature of the soldiers' duties in an unhealthy climate. The fact is that the strength of the force in the country is inadequate to the work they have to perform and reinforcements are urgently needed.

THE PLAGUE IN INDIA.

There does not, unhappily, seem to be much doubt as to the nature of the disease that has occurred at Bombay. A malady attended with glandular swellings, high fever, and delirium, and commonly fatal in three or four days, either possesses the features distinctive of plague or of a disease very closely allied to it. We learn through Reuter's Agency that three mild cases have occurred at Calcutta and that two of the patients have been removed to the isolation hospital and that every precaution has been taken to prevent the spread of the disease.

At the quarterly meeting of the directors of the Naval Medical Supplemental Fund, held on Oct. 13th, Dr. W. H. Lloyd, Inspector-General, being in the chair, the sum of £51 was distributed among the several applicants.

Correspondence.

"Audi alteram partem."

THE NEW POOR-LAW OFFICERS' SUPERANNUATION ACT.

To the Editors of THE LANCET.

SIRS,—From the letters and articles which have from time to time appeared in the medical, nursing, and other journals it is clear that an entire misconception exists as to the position of female Poor-law officers, and especially nurses under the provisions of the "Poor-law Officers' Superannuation Act" resulting in the appearance of some extraordinary suggestions and misrepresentations. With your assistance I will endeavour as briefly and comprehensively as possible to put before the female portion of the Poor-law service exactly how they are affected by the Act.

The principal grievances set up on their behalf appear to be—"(1) That they will be compelled to contribute out of their small pay towards a superannuation which few of them can hope to attain, and so to swell the pensions of the higher at the expense of the lower grades of the service; (2) That as this class of officer cannot continue at work until the age fixed in the Act, as the ground of retirement on account of 'old age' they will have to cling to their duties long after they have ceased to be efficient in order to obtain their pensions; and (3) That the superior class of young women who have been entering for training as nurses will be deterred by the deduction of a percentage of their pay from doing so in future, so that there will be a steady deterioration in the quality of nursing."

To deal with the last grievance first nurses may indeed pray to be "saved from their friends," for I can conceive nothing more insulting to the educated and high-principled young ladies who are burning to enter the noble profession of nursing than to suggest that they are actuated by such mercenary motives as to say, "I am anxious to devote myself to the profession of nursing if the salary and emoluments during my probation are worth £40 a year, but if they are only worth £39 I will have nothing to do with it." This is what the argument really comes to, for a probationer receiving an average of £15 a year during her period of probation, with board and lodging worth, say, £25, will have to pay 16s. a year towards a *certain* future superannuation if she continues in the Poor-law service and requires it when past her work. It should not be forgotten, too, that even if the nurse or female servant leaves the service for marriage or any other reason, and in later years is compelled through widowhood or any other cause to re-enter it, the money she has paid has not been lost, for she will be entitled ultimately to reckon one-sixtieth of her remuneration at the time of her retirement for every year of her earlier service. But should the small deduction unfortunately be found to keep the better class of women from entering for training as nurses, boards of guardians will have to offer an additional pound a year to the gross salary in order to make the net salary equal to what it was before the deduction under the Superannuation Act, and to thus keep up the "quality of nursing." For my own part I have too high an opinion of the class of women who have of late been entering the nursing profession to believe that this will be found necessary.

Those who put forward the second grievance can surely not have read or understood the provisions of the Act; all practical Poor-law administrators recognise that but few nurses, porters, and female servants are fit for active duty up to sixty or sixty-five years of age, but the Act does not require these persons to arrive at that age before they are entitled to their superannuation. If a nurse, porter, or servant at sixty, sixty-five, or any younger age is unable to discharge his or her duties "*with efficiency*" by reason of permanent bodily infirmity, the medical officer anxious to get an efficient staff will be ready to so certify, and the officer or servant will thereupon be entitled to a superannuation, irrespective of age, based upon his or her length of Poor-law service. Surely the greatest champion of the nurses cannot seriously suggest that a woman under sixty years of age who is bodily capable of efficiently performing her duties should be maintained from an earlier age at the cost of the ratepayers.

With respect to the first grievance let me point out that none of the officers in the Poor-law service at the date of the Act coming into operation are injured, for they are afforded the opportunity of "contracting out" and remaining under the provisions of the old Act, while all who in future enter the service will do so with their eyes open, with a full knowledge that they will be subject to a small deduction to secure a *certain* superannuation should they continue in the service and the further knowledge that every year for which they will contribute will count should they leave it from any cause and subsequently have to re-enter it. With regard to the probability or otherwise of female officers requiring superannuations, the experience of the past shows that having regard to their relative proportions in the service the number of female pensioners is practically as high as that of the male pensioners, and I may mention that of eleven superannuated officers of my own parish at this moment five are females. But the whole principle of the Act is based upon the theory that only a comparatively small proportion of those who contribute will ultimately need superannuation. We acknowledge at once that the percentage deduction would be quite inadequate if every contributor should require superannuation or the contributions should be returned to those who leave or die; through death, resignation, or other causes officers drop out before they arrive at the age or need of superannuation, and it is their payments that will provide *certain* superannuation for their more fortunate brothers and sisters who outlive them and claim the benefits of the Act. The proper way to look upon these contributions is that they are an insurance to render *certain*, if the officer lives to require it, ample and satisfactory superannuation, but if not that they have gone towards providing this for his or her more fortunate colleagues.

While I personally consider that neither the present nor future nurses or servants have any real grievance under the Act I am bound to say that in order to prevent even the semblance of one I succeeded with some difficulty in persuading the Government to accept an amendment of Mr. Boulnois, M.P., giving future nurses and attendants on the sick the same power of "contracting out" as is given by Section 15 to all "existing officers," and there was the fullest intention of inserting this clause on the third reading. The circumstances under which the Bill was passed on the last night of the Session rendered any attempt to do this absolutely fatal, and there was no time to get it put in in the House of Lords; but on behalf of our Superannuation Committee I have given a promise to Mr. Boulnois that if he introduces a short amending Bill to this effect next Session we will do all in our power to secure its passing, or, should he prefer it, that we will ourselves introduce and endeavour to carry such a Bill.

I know from experience that a "man convinced against his will remains of the same opinion still," and I am not very hopeful that this letter will convince those who are determined to make a grievance for the nurses out of the Superannuation Act; but I do hope that it will satisfy all fair and impartial critics that there is absolutely no foundation for the allegation that the Act is one to provide pensions for the "superior" at the cost of the "lower" officers, for it has been based upon lines laid down at large representative meetings of every branch of the Poor-law service for many years past, and the petitions in its favour have been signed by officers and servants of every grade, from the highest to the very lowest.—I am, Sirs, yours faithfully,

JOHN H. RUTHERGLEN,
Chairman of the Superannuation Committee of the Poor-law Service.
Guardians' Offices, Marloes-road, W., Oct. 12th, 1896.

"THE MEAN LENGTH OF LIFE."

To the Editors of THE LANCET.

SIRS,—In THE LANCET of Sept. 19th you favoured me with a notice of some remarks which I made in my address at the Sanitary Congress recently held at Newcastle. In those remarks I used some results obtained by means of Dr. Bristowe's formula to show that a death-rate of 10 per 1000 per annum was possible in a mixed community. Dr. Bristowe himself considered that his formula gave an approximation to the "mean duration of life." I say an approximation because that formula rested on an assumption of a state of things that does not actually exist, as so many mathematical formulæ do; but as that term is accepted to signify the mean duration of life as obtained by the life-table method I have adopted the term "mean length of life" for the results obtained by Dr. Bristowe's method; I might, however, for the purpose of my argument have employed any other term whatever. That a death-rate of 10 per 1000 per annum is possible for a limited time at any rate has been curiously enough shown by the fact that I have just recorded for St. George's, Hanover-square, with an estimated population of about 80,000, in the centre of London, a death-rate of 9·3 per 1000 per annum during the five weeks ending Oct. 3rd; indeed, I believe, for reasons I have elsewhere stated, that the true population is considerably higher than the estimated population, and the death-rate consequently lower than the calculated death-rate. This discussion about Dr. Bristowe's formula reminds me of what was truly said about the late Sir Benjamin Brodie, Professor of Chemistry at Oxford, and his "Calculus of Chemical Operations," that he could not get chemists to understand his mathematics or mathematicians to take any interest in his chemistry.

I am, Sirs, yours faithfully,

Savile-row, W., Oct. 14th, 1896. W. H. CORFIELD.

THE NEW HOSPITAL FOR WOMEN, EUSTON-ROAD, AND GENERAL PRACTITIONERS.

To the Editors of THE LANCET.

SIRS,—I beg to lay before you the enclosed copies of letters, and am Yours truly,

Thornhill-road, N., Oct. 13th, 1896. W. MCLAURIN.

"4, Thornhill-road, N., Oct. 4th, 1896.

"DEAR MADAM,—Mrs. L——, expecting to be confined with her first child in November next, engaged me some time ago to attend her. I next heard of her a few days ago, when asked to visit her. She seemed going on fairly well, but was somewhat unsettled in mind, and gave me an account of herself to the following effect. Fearing some difficulty in meeting the incidental expenses, and having been told that the Women's Hospital, Euston-road, undertook midwifery at a fee of five shillings, she presented herself at the out-patient department to make the necessary agreement. Without complaining of anything she was subjected to examinations, digital and other, by the principal and several assistants or pupils. She was urged to present herself again for examination—a lady even calling at her house to insist on the necessity for this. She was again subjected to the same treatment, even to the inducing of hæmorrhage. The reason for all this was never made clear to her, but her friend, who accompanied her, was told, in answer to inquiry, that some doubt existed as to the safety of allowing pregnancy to advance to the full term. She further added that she was expected to present herself at the hospital that day, but on the advice of friends did not do so. I then made an ordinary digital examination and failed to discover any abnormality. I confess that this *ex-parte* statement impressed me unfavourably. The five-shilling midwifery I presume to be a misunderstanding; but, indeed, the whole story puzzles me, and I must ask you to accept my assurance that, though I cannot ignore it I submit it to you in the confident hope that you can, and will not refuse to, give quite a different aspect to the affair, and may even save me, by a timely hint, from overlooking some point in the case of importance to my patient and to me.

"Believe me, dear Madam, yours faithfully,

"WM. MCLAURIN.

"The Physician to the Out-patients, The New Woman's
"Hospital, Euston-road."

"14, Nottingham-place, W., Oct. 6th, 1896.

"DEAR SIR,—In reply to your most courteous letter with reference to your patient, Mrs. L——, I shall be glad to call upon you to make everything quite clear. I need hardly assure you that, had it been known that she had engaged a private doctor or that her means would allow her to do so, her name would not have been taken in our Maternity Department. The inquiries about circumstances are generally more stringent. If you will kindly let me know an hour to-morrow afternoon when you are likely to be at home I shall have pleasure in calling upon you. I much regret that any misunderstanding should have arisen.

"Yours faithfully,

"HELEN WEBB,
"Consultant to the Maternity Department
"and Senior Out-patient Physician,
"New Hospital for Women."

"Dr. McLaurin.

"4, Thornhill-road, N., Oct. 6th, 1896.

"DEAR MADAM,—I have to thank you for your prompt reply to my letter of the 4th inst. As that letter, however, deals with matters of general interest I would suggest that, in view of my possibly submitting this correspondence to the medical press, an interview such as you kindly offer scarcely meets the case. Should you favour me with any further observations in writing I shall esteem it a personal obligation. "I remain, dear Madam, yours faithfully,

"Miss H. Webb, M.B., &c., "WM. MCLAURIN."
"Consultant Physician,
"New Hospital for Women."

"14, Nottingham-place, W., Oct. 8th, 1896.

"DEAR SIR,—I have identified Mrs. L——, and the facts concerning her case are as follows. The resident obstetrician has instructions to take measurements of the pelvis in all primiparæ and in all multiparæ who give a history of previous difficult labours. This was done in Mrs. L——'s case, when an external conjugate of 7¼ in. was found. When any abnormality exists the resident obstetrician brings the case to the notice of the consultant for the month, who makes a further

examination and advises on the course to be taken. In Mrs. L——'s case I found the external conjugate as above, with an internal conjugate of 4½ in., from which I decided that, though the pelvis was somewhat flattened, she could safely go to her full term. At the same time I ordered that the relations of the presentation to the pelvis should be carefully watched. The patient was treated with all consideration and made no sort of objection to what was done. The lady who called at Mrs. L——'s house was a student sent to inform her of the hour I had arranged for the consultation, and I may mention that I learn from the resident obstetrician that at the first visit no internal examination was made by anyone but herself. The general management of the maternity department of the New Hospital for Women is in the hands of a sub-committee consisting of members of the managing committee and of the visiting staff of the hospital. The resident obstetrician and consultants are appointed by the managing committee. The charity is intended for the necessitous poor, and inquiries as to means, &c., are made at the time the names are booked, and many cases are refused. As is the rule in all departments of the New Hospital, a small payment is required from every patient and goes to the funeral fund of the hospital. In the case of the obstetrical department this is 5s. The services of the consulting and visiting staff throughout the hospital are honorary. As in the case of other resident medical officers, the resident obstetrician receives a honorarium paid from the funds of the hospital. I believe this answers all the questions you ask. If you require further information I shall be glad to give it to you to the best of my ability. You are at liberty to make any use which seems good to you of this letter.—Faithfully yours,

"Dr. McLaurin. "HELEN WEBB."

"4, Thornhill-road, N., Oct. 8th, 1896.

"DEAR MADAM,—I must thank you for writing to me at such length respecting Mrs. L—— and the methods and constitution of the New Hospital for Women. My private opinion, which I have no right to urge on your attention and only as an elderly practitioner venture to express, is that these latter are faulty and might have proved disastrous to my patient. The question of payment bristles with difficulties. The hospital itself will almost certainly come to be regarded by its beneficiaries as merely a cheap doctoring establishment, and unless an impracticable stringency of selection be exercised the struggling members of our profession are sure to suffer and their opposition to be justly aroused. I heartily wish your sex every success in the practice of medicine, and I have never seen reason to believe that they shirk fair criticism. Availing myself of your permission I purpose sending copies of your very lucid communications to THE LANCET, together with my letters which elicited them, and I beg to remain, dear Madam,

"Yours faithfully,

"Miss Helen Webb, M.B., &c. "WM. MCLAURIN."

"SEROUS HÆMORRHAGE."

To the Editors of THE LANCET.

SIRS,—The letter of your correspondent, Dr. Christian Simpson, which asks for information as to whether an addition of acetate of ammonia would have the same effect in retarding milk coagulation as an addition of citrate of soda incidentally raises a question the importance of which overshadows that of the particular point upon which information is sought. This larger issue is the question whether such suggestions as the suggestion for decalcifying cow's milk which I made in THE LANCET some years ago[1] ought to rest upon the dicta of the man who recommends them or upon the authority of accessible experimental proof.

Dr. Christian Simpson has, in asking for a dictum from me as to the appropriateness of a particular addition to milk in lieu of setting about to determine the point for himself awakened me to the fact that I may have neglected in the paper referred to to render the experimental proof upon which I based my proposal sufficiently accessible to the practitioner. I can remedy the omission in a few words. The question whether a particular milk will or will not set in a firm clot in the stomach can be determined by any one at any moment with the very simplest apparatus. To determine the question we require nothing more than a couple of test-tubes or wine-glasses, the milk which is to be tested, and a bottle of ordinary rennet extract, and a teaspoon. Having provided ourselves with these we now warm our milk to blood heat and pour an equal quantity of the warm milk into our test-tubes or wine-glasses. We then make any additions we please to one of the samples of milk. Finally, we add a teaspoonful of rennet extract to each sample of milk. We have now only to determine, by gently tilting the containing vessels at intervals, whether the treated sample of milk clots faster or slower than the untreated sample. If, for instance, we add a small quantity (e.g., ¼ to ½ per cent.) of calcium chloride to the milk we shall see that, as Arthus and Pagès originally pointed out, the milk which has received this addition clots many times more firmly and many times more rapidly than the milk in the control tube. Contrariwise if we have added a small quantity of citrate of soda to the milk we shall see that the milk clots loosely and slowly. If Dr. Simpson will repeat this experiment with samples of ordinary milk he will probably find that the addition of 1 in 400 (i.e., 1 grain per ounce) of citrate of soda which I have recommended will considerably diminish the firmness of the clot. In the case of some milks it may, perhaps, be necessary to make a somewhat larger addition to secure a sufficiently loose and digestible clot. In other cases a smaller addition may suffice. What is essential in this matter is, however, not so much that we should know the exact percentage of citrate that will prevent the firm clotting of milk in an averege sample of milk as that we should know how to go to work to test our milk as to its digestibility. The method which has been described above is useful because it can be applied at any moment in the nursery or sick-room.

With regard to the particular question which forms the subject of Dr. Simpson's letter I have no information. I have not made any determinations as to the effect of additions of acetate of ammonia to milk. In view of the fact that acetate of lime is a soluble salt, such additions do not appear to be well calculated to achieve the desired decalcification of milk. If citrate of soda is, as Dr. Simpson urges, not always at hand, equally good results (except perhaps as regards taste) may be obtained by slightly larger additions of common cream of tartar. Tartrates are effective because tartaric acid forms insoluble combinations with calcium salts.

I am, Sirs, yours truly,

Oct. 13th, 1896. A. E. WRIGHT.

[1] THE LANCET, July 22nd, 1893.

"THE ABUSIVE COMPETITION OF MIDWIVES."

To the Editors of THE LANCET.

SIRS,—I am of "R.M.O.'s" opinion that lying-in hospitals and charities are open to the abuse he describes. I was lately much struck with a case in point. The profession knows that in the Council of the Hospital Sunday Fund and elsewhere I have endeavoured—in the interest of hospitals, of medical schools, of the profession, of the charitable public, and of the *morale* of the community generally—to restrict the use of hospitals to really fit cases. I shall continue to do so. The medical officers of lying-in charities would do a great service by calling attention to the evil described by "R.M.O.," and probably not over-described.

I am, Sirs, your obedient servant,

Highbury-place, N., Oct. 14th, 1896. JAMES GREY GLOVER.

"POISONOUS HONEY."

To the Editors of THE LANCET.

SIRS,—I read the account given in THE LANCET of Oct. 10th of the case of Poisoning by Honey reported by Mr. Lyman F. Kebler with much interest on account of a case apparently due to the same cause (but much less severe) coming under my notice only last week. I therefore append a short description of it. On Oct. 4th last I was called to see a friend of mine, a medical man, who had taken a small quantity of honey with his breakfast, but finding it had a most peculiar and disagreeable taste he only ate one mouthful of it. In about an hour and a half afterwards while riding in an omnibus he was seized with giddiness and nausea and lost consciousness for a few minutes. He was put in a cab, and when he reached his home he took some hot water as an emetic, but this did not have the desired effect. When I saw him, about an hour after he was first taken ill, I found him very pale and somewhat collapsed, still very giddy, and suffering with nausea. I at once ordered him to bed and after a few hours he felt better, but the nausea and giddiness lasted for some time, and complete recovery did not take place for some days. I may say that the patient had not felt quite as well as usual for a few days previously to this, but had never had any attack like this before, and he himself does not see what could have caused the symptoms if it were not the honey.

I am, Sirs, yours faithfully,

JOHN ATTLEE.

Brook-street, Grosvenor-square, W., Oct. 13th, 1896.

OPERATIONS FOR CLEFT-PALATE.

To the Editors of THE LANCET.

SIRS,—Mr. Lane's needle-holder, devised for use in operations for cleft-palate, and described in THE LANCET for Oct. 10th, seems to supply an instrument the want of

which has long been felt. It is obvious that the needles generally used, whether right-angled or self-feeding, are clumsy to a degree, occupy too much space, are difficult to use or to guide in a confined area, and frequently tear the flaps in the hands of the most skilful; whilst in the case of a child of six months they cannot be used at all. I have myself generally used a small straight or full-curved needle, mounted on an ordinary needle-holder, on account of the comparatively small damage to the flaps caused by its introduction compared with that of a mounted rigid needle; but the difficulty has been that the needle-holder was cumbersome and its handles when in use too near the mouth. With Mr. Lane's needle it is obvious this difficulty is entirely removed, and we shall no longer see a child of three years with its mouth full of irritating wire sutures, vainly trying to talk, or even endeavouring to remove the sutures with its fingers. Operation in the first year, when a child is more under control, and long before it begins to talk, removes many difficulties, is more likely to lead to good results, and renders unlikely the closure of a hare-lip previously to that of a cleft-palate, the one operation only rendering the other the more difficult. How many of our so-called surgical instruments might not be relegated with advantage to a museum for antiquities?

I am, Sirs, yours truly,

Albion-street, Hull, Oct. 11th, 1896. ALFRED PARKIN.

"A CASE OF VOMITING LARGE MASSES OF CANCEROUS MATTER."

To the Editors of THE LANCET.

SIRS,—In accordance with your suggestion, I proceed to give a few brief additional details of the case of Vomiting Large Masses of Cancerous Matter, which was reported in THE LANCET of Oct. 3rd. The patient paid me a visit last evening in order to show himself to me, and his healthy florid looks and robust appearance quite astonished me, for I had not seen him for some months. He told me he felt quite well and weighed more than he had done for the last thirty years. He has no pain in the stomach and can digest his food with comfort. I examined him carefully and found nothing abnormal either in the abdomen or elsewhere. The patient's progress towards recovery from his emaciated and exhausted state was necessarily slow, still he advanced in health and strength till the first week in July, when he considered himself able to resume his usual occupation, that of a sawyer, and from that time to the present he has not been off work a single day. He is a very abstemious and temperate man, and is wise enough to avoid taking any kind of food or drink which might prove difficult of digestion. He has never vomited since he threw up the "cancerous matter," and he hopes he will never throw up the same kind of matter again, and so do I; and I also trust that on that occasion he expelled from his stomach the morbid growth both root and branch, and that there has not been left a single germ to strike root and spring up again. I confided to the patient's wife that her husband had made a wonderful recovery and that his case was so interesting that I took a note of it and had sent it to THE LANCET, but that I had not mentioned her husband's name. Not having mentioned her husband's name rather ruffled the lady's temper, for she remarked that "her husband never did anything that could make him ashamed of his name." This reminds me of a circumstance which occurred some years ago. I published in THE LANCET a case of actinomycosis. A medical friend informed some of the relatives of the patient of the fact. On hearing this piece of news a copy of THE LANCET was ordered for each member of the family to be preserved as a memento. But the disappointment was great when it was discovered that the name of their dear relative was omitted from the paper. "We would willingly," said a brother to me, "have given a £5 note a piece for each copy of THE LANCET if our brother's name had only been mentioned in the account of his illness."

I am, Sirs, yours faithfully,

Lincoln, Oct. 6th, 1896. WILLIAM O'NEILL, M.D. Aberd.

"ST. ANDREWS UNIVERSITY MEDICAL SCHOOL."

To the Editors of THE LANCET.

SIRS,—A correspondent writing to you from St. Andrews University criticises in THE LANCET a notice of motion given by me at the last meeting of the University Court. That motion, I rather think, your correspondent knows aims simply at securing that our own best students may have some inducement to hope that they may have a chance of getting appointed to an assistantship which may enable them for at least three years to devote themselves almost wholly to the subject in which they have specially excelled. When a man has taken a degree with honours in any department of study surely it is no insignificant appointment which enables him at the expense of one hour per week for four months, at the remuneration of £100, to carry on his special studies; and just as surely any man who knows what an assistant's work in St. Andrews University is will say that the man who has taken his degree with honours is a most suitable man for such work. Certainly the best of our assistants have been such men. But, good as such men have been, there have been year by year as good men among our graduates, and many of these men have complained to myself that the chance of an assistantship has never come their way. There are very few professorships going, but there are many excellent school appointments, and surely a candidate for a mastership in a high-class school could not have a higher recommendation than that he has been three years, after graduation with honours, an assistant in a university in the subject to be specially taught in that school. Our main aim here must be to create first-class teachers with the hope that out of these, as in past days, we may draw first-class professors.

I am, Sirs, yours faithfully,

St. Andrews, Oct. 9th, 1896. MARK ANDERSON.

"LINCOLN MEDICAL PROTECTION FUND."

To the Editors of THE LANCET.

SIRS,—Will you kindly publish the following additional subscriptions received for the above fund? The total amount received is £371 19*s.* 6*d.*, of which sum £44 19*s.* 6*d.* was collected by Dr. Barnes.—I am, Sirs, yours truly,

Oct. 12th, 1896. W. A. CARLINE, Hon. Treasurer.

	£	*s.*	*d.*
Wm. Easby, Peterborough	0	5	0
O. Giles, Sleaford	0	10	0
Manchester Medical Guild, per A. Stewart	1	1	0
S. C. Griffiths, Society of Apothecaries, London	0	5	0
Walter Edmunds, Lambeth Palace-road	1	1	0
George Elam, Manor-road, Stoke Newington	1	1	0
A. B. Stevens, Springfield, Tulse-hill, S.W.	5	5	0
A. M. French, H.M.S. *Phœton*	1	1	0
M. E. Ling, Saxmundham, Suffolk	1	1	0
W. G. Walford, Finchley-road, N.W.	2	0	0
Victor Horsley, Cavendish-square	1	1	0
From the East Anglian and the Cambridge and Huntingdon Branches of the British Medical Association, per Dr. Edgar G. Barnes:—			
T. C. Allbutt, Cambridge	1	1	0
H. Gervis, Bishop's Stortford	0	10	6
R. H. Lucas, Bury St. Edmunds	0	10	6
W. A. Elliston, Ipswich	0	10	6
W. H. Griffiths Williams, Mottisball	0	10	6
Sir Peter Eade, Norwich	0	10	6
C. Muriel, Norwich	0	10	6
W. H. Day, Norwich	0	10	6
F. Preston, Norwich	0	10	6
S. H. Burton, Norwich	0	10	6
F. W. Burton-Fanning, Norwich	0	10	6
H. C. Nance, Norwich	0	10	6
D. D. Day, Norwich	0	10	6
J. S. Hinnel, Bury St. Edmunds	0	5	0
W. Maine, Clacton-on-Sea	1	1	0
C. E. Addison, Colchester	0	10	0
Haynes Robinson, Norwich	0	10	6
S. Barton, Norwich	0	10	0
A. C. Turner, St. Neots	0	10	6
Mrs. E. Garrett-Anderson, Upper Berkeley-street, W.	0	10	6
W. Bodkin, Chelmsford	0	10	6
W. H. Bansall, Aylsham	0	5	0
H. Stear, Saffron Walden	0	10	0
W. A. Smith, Newport, Essex	0	10	0
F. A. Rookes, Felixstowe	0	10	6
E. Stanley Wood, Cambridge	0	10	6
Leslie Fletcher, Diss	0	5	0
G. C. Giles, Attleborough	0	10	6
R. McKelvie, Binfield	0	5	0
C. F. Wright, Eye	0	5	0

ABORTIONS.

To the Editors of THE LANCET.

SIRS,—There must be very many among your readers who, in the course of their professional duties, would be in a position to assist an embryologist to the possession of valuable material for research. So slight are at present the additions made to a knowledge of human embryology in Great Britain and Ireland that one wonders if Allan Thomson ever really worked among us. Unfortunately, most of those who could make good use of such material rarely or never find it placed in their way. If they would only realise it physicians and general practitioners could help forwards our knowledge of the normal and abnormal development of man enormously. As

one who ardently desires to work out certain important problems in human development—problems whose solution may turn out to be of great practical value—may I appeal for assistance to the readers of THE LANCET? Abortions of the first eight weeks of pregnancy are those which would be of service. The preservation of such abortions is a matter of some moment. There are many ways of preparing such for scientific work. They should be placed, as fresh as possible, in one or other of the following fluids. The membranes should be left over the embryo, but a slit should be made in them to allow the fluid to penetrate. The fluids are named in order of preference: 1. Corrosive sublimate, seven parts by weight dissolved in 100 parts of boiling water; used cold with or without the addition of 2 per cent. glacial acetic acid. 2. A solution of picric acid of 3 per cent. strength. 3. A solution of chromic acid of 1 per cent. strength. 4. A solution of potassium bichromate of 5 per cent. strength. 5. Rectified spirit containing 20 per cent. of water. A light pad of cotton-wool should be placed in the bottle and the preparation should be sent away at once, with any clinical particulars, such as date of last menstruation, date of abortion, &c. I should be glad to communicate more fully with any physician who may have the opportunity and the wish to help me, and would send bottles containing the best fluid for preservation to any such. I need only add that the source of any material obtained would be gladly acknowledged when publishing researches upon it.

I am, Sirs, yours obediently,

J. BEARD, D.Sc.,
University Lecturer in Comparative Embryology.
Zoological Department, University of Edinburgh,
Oct. 12th, 1896.

HOSPITAL ABUSE.

To the Editors of THE LANCET.

SIRS,—Knowing the fairness by which your valuable paper is characterised, I beg herewith to submit to you the following corrections which refer to my own case cited in your issue of last week by your Commissioner under the heading of "Hospital Abuse." I feel sure that you will give publicity to facts which will remove an extremely unpleasant stigma unknowingly placed not only on myself but on my father. I should mention that I am the individual described by your Commissioner or his informant as being the "very considerate and dutiful son" of the "high ecclesiastical dignitary," whose sense of filial obligation has so far obliterated his "sense of honour and duty" as to cause him to forget that he was "robbing the poor of the charities to which the poor alone are entitled, and robbing the medical profession of the fees to which it is exclusively entitled" as much as "the clergy to their stipends."

Will you allow me, therefore, to say that the statements made by your Commissioner are entirely without foundation, and to contradict them by briefly citing the plain facts of the case? 1. My father is not a high ecclesiastical dignitary—he is a priest vicar. 2. My motive in coming to the hospital was not to save my parents expense. The accident occurred five hours before my admission to the hospital, during which time I was unsuccessfully endeavouring to obtain medical assistance at Axminster, where the accident happened. Not wishing to repeat this experience in Exeter, and as the nature of the accident demanded immediate attention, I decided to proceed to the hospital at Exeter as soon as the train service would allow. 3. I obtained nothing gratuitously; through my parents I sent a donation to the hospital immediately I was well enough to leave—an amount, I may add, considerably exceeding the charge which would have been made for the same time by a medical practitioner. 4. There was not, and is not, any "inconvenience or unpleasantness" to be encountered at the hospital. 5. My parents' medical man was present at the operation and warmly expressed his approval of my course of action, as the case was extremely pressing, which, by the way, is the only statement made by your Commissioner's informant which approaches veracity.

I refrain from treating the matter on the score of humanity or from quoting the hospital rules, which do not concern me. I merely state the facts of the case, and considering the tone and mode of expression which your Commissioner has adopted, I hardly think it necessary to do more than subscribe myself,

Sirs, yours faithfully,

Leebourne, Exeter, Oct. 14th, 1896. A. M. FOWERAKER.

"BACTERIOLOGY AND THE MEDICAL CURRICULUM."

To the Editors of THE LANCET.

SIRS,—Bacteriology has been revolutionising surgery and medicine for the last twenty-five years, but its study is not yet included in our curriculum, and the demand for its inclusion even now sounds rather like the voice of one crying in the wilderness. The threatened creation of a handful of opponents in the shape of registered midwives raises a prompt and spontaneous whirlwind of agitation. We are too commercial and much too unscientific or our souls would be stirred more over bacteriology and less over midwives. It is almost incredible that a subject of such vital importance should remain unrecognised so long. Will our grave and reverend seniors wake up of their own accord or will they wait for the great British public to shake them?

I am, Sirs, yours truly,

Oct. 12th, 1896. A GENERAL PRACTITIONER.

HOSPITAL ABUSE.

(BY OUR SPECIAL COMMISSIONER.)

II. EXETER—(*continued*).[1]

As already stated, energetic measures have in some instances been taken at Exeter to prevent hospital abuse. This is more especially the case with regard to the Eye Infirmary. At the entrance door of this hospital there is written in large letters: "Eye Infirmary—for Poor Persons Only." The latter three words might with advantage be "writ large" over the door of every hospital; yet such announcements would be of little service if they are not followed up by the strict application of appropriate administrative measures. In respect to diseases of the eye the ophthalmic surgeons at Exeter will not see private patients for less than a guinea. This somewhat complicates the situation, for though there are many who are willing to pay, yet they are not all able to afford so large a fee. Where, however, a case requires prolonged treatment the patient would be admitted to the hospital after the payment of one or more fees and after he had demonstrated to the medical officer's satisfaction that he could not afford to continue such payments. This is more especially the case when operations are necessary. It would not be reasonable to ask a person whose income does not exceed £100 a year to pay, for instance, twenty guineas for an operation. Such a person might pay one or two guineas as a private patient and then be admitted in the hospital. Indeed, for ordinary medical and surgical cases as well as for diseases of the eye there are many poor people in Exeter who have a sort of superstitious faith in "the guinea doctor." With great trouble and much self-sacrifice they scrape together the traditional guinea, and then if they find their case is serious they ask the medical man whom they have consulted to try to procure their admittance to the hospital. Many of these patients prove to be just the very sort of cases for which hospitals were intended. These people having, by the exercise of great economy and self-denial, obtained and paid for the best advice available are, if their complaints prove sufficiently serious, justly entitled to benefit by the public charities.

The rule which establishes that the Exeter Eye Infirmary is only available for the poor also applies to accidents. But it was, above all, necessary that the managing committee should clearly define what was meant by the word "poor." This has been done by a rule which sets forth that, except under special circumstances, no one should be admitted whose income exceeds 25*s.* a week. The staff have nevertheless the right to admit those who earn more if they have many children, or if, as already stated, an expensive operation altogether beyond the applicant's means is necessary. It must further be borne in mind that wages are very low at Exeter and in the neighbourhood. Labourers' wages vary from 10*s.* to 15*s.* a week. Skilled mechanics rarely earn more than 25*s.* On the other hand,

[1] The previous articles on this subject were published in THE LANCET on the following dates: (1) Sept. 26th, 1896, Plymouth and Devonport; (2) Oct. 10th, 1896, Exeter.

rents are very cheap and so is the cost of living. If 25*s.* is a suitable wage limit for Exeter, then the wage limit should not be less than 30*s.*, or perhaps more than 30*s.*, for London. The difficulty, however, is not so much the fixing of an equitable wage limit or of allowing exceptions in certain cases: the difficulty is to find out what is the real position of the patient. For this purpose hospital authorities should be very strict in insisting that the details on the recommendation papers or tickets should be accurately and fully given. If the person who has given the ticket fails to answer the questions relating to the patient's income then this part of the formula should be filled in by the house surgeon or hospital steward. The surgeon should have the right to refuse to see a patient simply on the ground that the questions asked on the recommendation have not been answered. The patient should be warned that if he gives a false answer he may render himself liable to prosecution for obtaining medical aid under false pretences. These in any case are the principles on which the staff of the Exeter Eye Infirmary are seeking to deal with the question of hospital abuse. A man who succeeded in gaining admittance, but who, as has since been ascertained, has a rental of £100 per annum, is to be prosecuted, and the result of this case will be watched with the utmost interest by the profession. Another patient was to be prosecuted if he failed to pay £3 3*s.* for having obtained advice three times as an out-patient at the Eye Infirmary. This patient preferred to pay the three guineas rather than incur the opprobrium of a public trial. The threat of publicity is a very valuable weapon in the hands of the profession. Even if the magistrates failed to convict the patients would be terribly punished if, through the publicity of the courts, it was proclaimed to the world that they had sought, by means of false statements, to obtain for their own personal benefit that which was intended for the exclusive use of the poor. To carry out such energetic measures it is very essential that the medical staff should be on the best of terms with the managing committee. At the Exeter Eye Infirmary all the members of the medical staff are also members of the managing committee. This is very important. It prevents misunderstanding and conflicts and helps to ensure the uniform application of accepted rules and policy. As a result, the opinion was freely expressed that there was less abuse at the Exeter Eye Infirmary than is usually the case at such institutions. The most embarrassing cases arise with those who are on the borderland, who are undoubtedly poor, but perhaps not quite poor enough to be the recipients of public charity. In these cases it is usual to give the patient the benefit of the doubt, if the doubt is but slight; but if there is great doubt then the matter is referred to the Charity Organisation Society. The hospital subscribes to this body and great satisfaction is expressed at the services which it has been able to render. Thus a short time ago a woman came and on being questioned said that her husband worked on a farm. This answer was so framed as to convey the impression that the woman was the wife of an agricultural labourer. It was found, however, that her husband was a farmer and the case was referred to the Charity Organisation Society. Nevertheless, the patient was ultimately taken into the hospital. The inquiry instituted had established that though the husband was a farmer the farm was heavily mortgaged and the couple were very poor. In the same manner another applicant was discovered to be the owner of a shop, but the shop was also heavily mortgaged and he had a sick wife; so this, again, was considered a fit case for admission into the hospital. In both cases, however, an inquiry was necessary, otherwise gross abuse would be a matter of daily occurrence.

Among the many instances of attempted abuse related to me as having been noted at the Eye Infirmary was that of a farmer with a rental of £600. It was with difficulty that this man could be persuaded that he was not a fit subject for charitable relief. He ended, however, by paying ten guineas for the medical services be required. Another man came to the hospital and, after having a cataract removed, purchased an estate for £10,000 and is generally supposed to be worth £20,000. On one occasion a lady of title presented herself with her daughter. As an excuse her ladyship explained that she was not so anxious to save payment of medical fees, but thought she was more likely to meet the best medical man at the hospital.

The strictness of the investigations at the Eye Infirmary and the steadfastness with which the ophthalmic surgeons at Exeter have maintained their guinea fee tariff has had the effect of driving many patients to London. Nor will the hospital authorities compound the difficulty by establishing a paying ward. They urge that the poor gentry and others of moderate means should pay at least small fees as private patients, and when their means are exhausted then they should be admitted free of charge in the hospital like other poor people. Whatever measures, however, are adopted to prevent abuse in a provincial hospital, these are often defeated by the lax practice of the London hospitals. The people at Exeter know full well that if they cannot get into the hospital of their own town they will easily obtain admission in some London hospital. Tradesmen, well-to-do farmers, and others consult surgeons at Exeter, and if an operation has to be performed they very unhesitatingly declare that they must first have an understanding about the fees. If the fee is high they frankly explain that they prefer to go to a London hospital, where the operation will be performed for nothing. A little while ago a woman went up to London from Exeter to undergo an operation. Thinking that she would have to pay surgical fees, &c., she put £40 in her pocket. On returning to Exeter she, however, boasted that she had succeeded in gaining admission into a London hospital and had brought her £40 back with her. Even for a single consultation many persons prefer to spend the cost of the fees in a journey to London. For about £2 it is possible to go to London and back and pay the hotel bill as well. There is a woman at Exeter whose husband is the owner of two shops. This person goes up regularly three times a year to London to consult a physician at a London hospital. Of course, she spends more money in obtaining this gratuitous advice than it would cost her to consult the best physicians of Exeter; but it is to be presumed that she enjoys her trips to town. The London hospitals provide, therefore, a good pretext to provincials who want a little diversion. By economising their medical fees they obtain the means and the excuse for enjoying themselves for a day or two in London. A man and wife, who have separate banking accounts, were mentioned to me as being regular attendants at a London hospital. They preferred going to town and thought they got more for their money than if they simply called in an Exeter practitioner. One of the surgeons of the Exeter Eye Infirmary assured me that when he went to London he had, on several occasions, seen some of his paying patients in the waiting room of the Ophthalmic Hospital at Moorfields. He thought that at such hospitals someone specially charged to make inquiries should be employed. In most cases there would be no harm done in applying merely a tentative treatment to new patients till such time as the inquiry had been concluded and proved satisfactory. He was convinced that at the Ophthalmic Hospital at Moorfields dozens of patients who could well afford to pay were seen every day. As a result there were very few ophthalmic surgeons in London who made large incomes.

At the General Hospital of Exeter there is a rule to the effect that a patient may be charged an adequate sum if it be proved that he is not entitled to receive charitable aid. Half the sum thus obtained is given to the medical man who had charge of the case. The same division is made with the donations of the patients. In the course of the year, however, there are only about four or five cases of abuse that can be so brought home to the patients as to compel them to pay. At the Public Dispensary it also happens that the enquiries instituted often prove futile. There are a good many people who go to the dispensary after having paid a certain number of 2*s.* 6*d.* fees to private practitioners. The impression produced is that they can pay. Effectively they can pay and have paid, but they can no longer pay. The Exeter Dispensary also subscribes to the Charity Organisation Society and refers to this institution when it is thought that any of the patients are not entitled to charitable aid. But a large number escape notice. It takes as a rule much less time to give a patient medical advice than to cross-question him as to his financial resources, his family, and his occupations. In this, as in so many other circumstances, medical men have, up to the present, been too much absorbed by the scientific side of their professional interests and have very generally neglected the economical side. To find out that a patient has means and should not seek advice at a hospital is no part of medical diagnosis and such discoveries do not increase the medical skill of the practitioner, but they should very materially increase the incomes which members of the profession are able to earn. There are

more ways than one by which the position of medical men can be improved, and it is as necessary to watch over the economic as over the scientific interests of the profession. In this respect the medical practitioners at Exeter enjoy at least one advantage—they are all on excellent terms with each other. There is no quarrelling, no backbiting, no dividing up of the profession into factions or cliques. Strange as it may seem, this was the reason that was given to me why so little had been done in respect to ethical questions. Some years ago a practitioner at Exeter wrote a letter which implied that there was no one in the town capable of saying when a case of ringworm was absolutely cured. Thereupon the other practitioners convoked a meeting, loud and angry protests were made, and altogether a good deal of disputation ensued. All this unpleasantness arose from the raising of the ethical question involved in the letter on the ringworm difficulty; and as, after all, nothing was done or decided, but much recrimination occasioned, the Exeter practitioners have fought shy of ethical questions ever since. This unfortunate episode is, however, not a sufficient excuse for maintaining for ever an attitude of passive neutrality, when, throughout the country, medical men are seeking to form medical unions so as to deal effectively with a great number of urgent economical problems.

BIRMINGHAM.

(FROM OUR OWN CORRESPONDENT.)

Railway Companies and Smoking.

AN important action was tried at the county court on the 6th inst. before Sir Richard Harrington. Mr. R. A. Dale, barrister, brought an action to recover £50 damages from the London and North-Western Railway Company in respect of discomfort and annoyance suffered by him through the non-compliance of the company's by-laws. In his particulars of claim the plaintiff complained: (1) That from January to the end of April, 1896, the defendants permitted persons to smoke tobacco in the general waiting-room at Stetchford Station in which the plaintiff was waiting until the arrival of trains; (2) that on April 19th the defendants permitted three persons to smoke in a non-smoking compartment in which plaintiff was a passenger and also permitted one of such persons to ride in such compartment whilst intoxicated, and further allowed the floor and cushions of such compartment to be in a dirty condition; (3) that on May 6th and 31st defendants permitted the compartments of carriages in which he was travelling to be overcrowded; and (4) that on certain dates defendants permitted human excrement to be and remain exposed upon the platform at Stetchford Station. Defendants paid £3 3*s.* into court. Here was a chapter of evils, which had been a long time in accumulating, and which required a courageous person to formulate against a powerful railway company. The legal gentlemen on each side had a good innings and the judge gave a careful summing up. The result was that the jury awarded the plaintiff £5 damages in respect of the smoking in the waiting-room and £5 on account of overcrowding, but made no award for allowing smoking in a non-smoking compartment, which question was formally left to them in view of the possibility of subsequent proceedings.

The Death of the Archbishop of Canterbury.

The death of this eminent Prelate had more than ordinary interest for Birmingham. His uncle was Mr. Alfred Baker, for many years surgeon to the General Hospital, with whom he ever kept on terms of affectionate intimacy. The Archbishop's career commenced at King Edward's Grammar School in this town. A few years ago he visited this scene of his early life and charmed his hearers with vivid recollections, which he stated that he retained with the greatest feelings of pleasure. His interest in the school was a source of constant satisfaction, while his counsel and support were given at all times willingly and with great weight in educational matters.

Hospital Changes.

The committee of the General Hospital here made some changes in the administration of the medical department. Two new posts have been made for anæsthetists; each is to have £40 a year and to attend three mornings a week. The salary of the resident surgical officer has been fixed in consequence at £100 a year. It is thought that these changes will conduce to the better working of this department and allow the resident officers more time for their own duties. At the Queen's Hospital it is thought possible that some changes will shortly be made in the surgical staff. Whether the number of surgeons be limited to three or extended to four is a question affecting the interests of the institution not as yet settled.

Important Adulteration Case.

At the Wolverhampton Police-court on the 9th inst. a firm of wholesale druggists were summoned by the inspector under the Food and Drugs Act for giving a false warranty as to the quality of some ipecacuanha wine they had sold to a chemist. On analysis it was found that the wine contained 0·27 grain per ounce of salicylic acid. The stipendiary said that he did not think that there was any intention to defraud. His opinion was that the British Pharmacopœia was the only standard that ought to be relied upon. A conviction and fine of 20*s.* and the costs was imposed in one case and the second case was withdrawn. The costs amounted to £11 10*s.*, a rather expensive detail for so small a quantity. The question of principle, however, is worth the money, and the matter of guarantee a very important one. Evidently care is required in the attempts to deviate from the standard authority, however much the particular drug may be affected, in the interests of both the retailer and the public.

Oct. 13th.

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

The Medical School: Mr. Hutchinson's Address.

THE winter session of the department of medicine at Owens College was inaugurated on the 2nd inst., when the custom, not altogether modern, of going afar for prophets or distinguished men was honoured by Mr. Jonathan Hutchinson, who gave the address reported in your last number. His "permission of abstinence" from cricket, golf, and football, which was extended also to games of cards, "and even possibly to the sublime gratifications of music," though no doubt wise in very many cases, will not receive universal assent. Before Mr. Hutchinson's address the Dean of the school gave a sketch of the medical department during the past session. The total number of students attending classes during 1895-6 was 397, an increase of 14 on the previous year. Of these 209 had been preparing for the degree examinations of the Victoria University, 53 for those of the University of London, and 14 for the degree examinations of other universities. One hundred students had been preparing for the examinations of the Conjoint Colleges for special qualifications, and 21 for the diploma in Dental Surgery. The new medical buildings, laboratories, and class-rooms opened in the previous year by the Duke of Devonshire have been fully equipped and in constant use. The additions to the departments of anatomy, medicine, surgery, and obstetrics, as well as those to the public health, the pharmaceutical, and the dental departments are rapidly approaching completion, and many are already occupied. In the evening the annual medical dinner of the Owens College and Manchester Royal Infirmary took place at the Queen's Hotel, Professor Dixon Mann presiding. Seventy-six gentlemen were present, many of them being old students. Mr. Hutchinson and his Honour Judge Parry responded to the toast of "Our Guests," and Professors Boyce and Paterson of Liverpool were amongst the visitors.

The Milk Supply.

On Thursday evening last, Dr. Niven, medical officer of health for Manchester, gave an admirable address at the meeting of the Ancoats Healthy Homes' Society, entitled "How a City may be Supplied with Good Milk." He showed the importance of the subject by instancing the fact that "a vast number of children were swept away every year by diarrhœa ..... directly caused by the milk" on which they were fed. This was not always the fault of the farmer or the milk seller, but often of the mother who neglected the cleansing of tubes and bottles, &c. But in many farms the cows are in a very dirty condition, and the milk becomes contaminated. About 20 per cent. of the cows in this country are affected with tuberculosis, and if that is

the case it is certain that more than 20 per cent. of those kept in a crowded city like Manchester—many of them never leaving the cowsheds, which are often dirty and ill-ventilated, for the whole year round—are the victims of this disease; and a certain proportion of them gave milk capable of producing "consumption of the bowels." Dr. Niven pointed out how widespread and disastrous epidemics of typhoid and scarlet fevers and diphtheria were often due to infected milk. These evils he did not think were necessary, and he proceeded to tell of a recent visit he had paid to Copenhagen and "of the plan which is there in use for giving to the people milk which is absolutely pure." He went to see for himself if the statements by Mr. Stuart Macgregor, the British Vice-consul, in a pamphlet on the system adopted there, were correct. He found, two or three miles from Copenhagen, a large factory for the manipulation of the milk sent there from a number of farms. At each of these farms every precaution was taken to ensure cleanliness. The cows were fed on the best food, were groomed day by day as carefully as the best horses, and periodically examined by the veterinary surgeons of the company. The milk after being drawn from the cows was plunged into ice. Ice boxes were near it during its transit by rail and it was always kept at a low temperature. On arrival at the factory it was tasted and rejected if in the least degree tainted. Then it was filtered through gravel beds. The best quality called "the children's milk" was put in bottles, labeled, and sealed, and like the other sorts was kept clean and pure till it was put into the hands of the consumer. The farmer had no inducement to send milk from diseased animals because he was paid for his usual quantity in any case. Then as regards the workpeople, if disease broke out in their families they had no object in concealing it, for their wages were continued while they were away from work. The company received the milk from fifty-seven large farms, each having from 50 to 200 cows. Last year the total number of cows supplying the company was 5024, which was very much more than double the number of all those in the city of Manchester, "and the amount of milk supplied in 1894 to the public was 2,000,000 gallons, which was more than one quarter of the amount of milk brought to Manchester in the same period. At the farms he visited the cowshed was beautifully clean—the floor was even of concrete—and so arranged that no dirt could easily rest upon any part of the cow's stall, and it was very easily taken away if it did. The cows were invariably littered with clean straw and not with dusty peat moss, or dirty horse manure, or cotton shoddy, or any material of that description. Everyone would agree, he thought, that if they could get milk from English dairies protected in this manner at a reasonable price—the price in Denmark was only 1*s.* per gallon for the best milk—they would be conferring a great boon on the community, and he did not see any reason why it should not be done." Dr. Niven's address was given to a crowded audience, the majority being women, and should do good in educating some of them up to the point of seeing the importance of pure milk, but it is to be feared that the greater number will need a persistent crusade to rouse them out of their indifference. Manchester is well situated for obtaining good milk from the Cheshire pastures, and there is no doubt that such a system as that described by Dr. Niven might be organised and would pay all concerned quite as well as the present arrangements do, so that philanthropy would not run counter to business.

The Sewage Effluent Disposal Scheme.

This scheme for constructing a conduit from Davyhulme to the estuary of the Mersey has called forth volumes of criticism. On Wednesday last, at the monthly meeting of the city council, Alderman Thompson endeavoured to answer some of the objections to the scheme. Liverpool has been apprehensive lest dreadful consequences should befall the estuary, and "one of the Liverpool papers spoke as though they were proposing to send crude sewage to their very doors." The chief engineer to the Mersey Dock Estate has recently stated that "711 million cubic yards of water passed into the tidal estuary of the Mersey during each spring tide, or 1422 million cubic yards every twenty-four hours." But even when the Manchester population has reached 650,000, the total quantity of effluent proposed to be passed into the tidal water will not exceed 155,000 cubic yards per twenty-four hours, "which he thought disposed of this cry." He moved the adoption of the minutes. Sir John Harwood moved an amendment postponing the sanction of the council for three months so as to give the members more time to become acquainted with the scheme, and time also to see if any modifications can be made or an alternative scheme adopted, &c. One of his arguments was that as Salford was in the same case it might be that she would join in a sewage scheme with Manchester to the advantage of both. The amendment was carried by a large majority, so there will be three months for mental assimilation by the council, but, as Alderman Thompson said, "the committee were under an obligation to the law to have an effective scheme within twelve months." It will not do, therefore, to waste too much time."

Boarding-out: A Tribute to Lady Guardians.

Such is the heading of a part of the report of the last meeting of the Chorlton Guardians. Mrs. Sale and Mrs. Redford, two of the lady guardians, together with Miss Mason, the Local Government Board inspector of boarded-out orphans, paid a visit to inspect the children of the Chorlton Union boarded-out under the care of the Boughton (Chester) Committee. Most of the children were in the neighbourhood of Chester. They divided the homes into three classes, the first good, the second indifferent, and the third decidedly bad. Particulars of the houses were given, several of them being in the third class. In these the children were neglected in some way or another, either they were dirty, or their clothing not as it should be, or their general treatment unsuitable. It must be difficult to find any large number of cleanly, intelligent, and kindly people willing to take charge of these workhouse children and treat them as their own, even if fairly paid, but Dr. Martin expressed the belief that the parsimonious way in which the foster parents were treated, accounted for the failure of the boarding-out system. The clerk said "he thought Chorlton paid as badly as any one—3*s.* 9*d.* to 4*s.* a week, with £2 a year for clothing." Dr. O'Doherty spoke of the good work the lady guardians had done; "they had never yet sent the ladies on a deputation without having been favoured with a report of a different type from that given by the men." The chairman, Dr. Rhodes, said the report showed that the guardians could not trust to a boarding-out committee. "They must rely on themselves, and the ladies should be sent on surprise visits to see things were all right." A vote of thanks was passed to Mrs. Sale and Mrs. Redford. The boarding-out plan is sure to fail in most cases unless accompanied by thorough and frequent personal supervision, which can no doubt be carried out far more efficiently by sensible and observant women than by the average male guardian. But if successful it will be the best method for doing away with the workhouse taint.

Oct. 13th.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

New Infirmary, Newcastle.

AT an influential meeting convened and presided over by the Mayor in the council chamber at the town hall, it was last week announced that some £40,000 had already been subscribed towards the building fund. It is believed that the working men will be able to raise some £20,000, so that the prospect of a new infirmary being built is now pretty well assured. There will remain the difficulty of site, but as some of the most liberal donors have made it a condition that the present site should be retained, and the staff is unanimous that it is the best, there can be little doubt that the infirmary will remain where it is. The workmen wish it too. The letter advocating the retention of the present site and showing how a hospital can be built upon it without enlargement and without interfering with the work of the institution has been sent to the governors by Dr. Gibb, consulting surgeon to the infirmary, and his arguments have had great weight. In connexion with the re-building of the infirmary some feeling is finding expression in the public press as to who should be mayor for next year. The present scheme has been set on foot by Mr. Riley Lord, and many think that he should be re-appointed mayor and allowed to finish what he has so successfully begun. The town council, however, seems to have committed itself to the election of another gentleman for the

office of mayor for 1897 before Mr. Lord's scheme was formulated, and as this gentleman consented to act, and still wishes to do so, it is unlikely that he will not be elected. Mr. Lord has made an excellent mayor, and has been ably assisted by his daughter-in-law, who as mayoress has been most popular. When the Royal Victorian Hospital, as it is proposed to call the new building, is opened, it is to be hoped Mr. Riley Lord may again be mayor, and that the same charming lady may be able to accept the position of mayoress.

A Good Move.

The Gateshead guardians have decided to purchase some thirty-six acres of ground in the country upon which to build six semi-detached cottages to begin with for the accommodation of boys and girls at present housed in the workhouse. Those intended for the boys will contain twenty inmates, for the girls fifteen. The cost of each cottage is not to exceed £650. A considerable outlay will be required to carry out this laudable experiment and it is to be hoped that the result will be satisfactory. Nothing could be much worse for a child than to be brought up in a workhouse.

Revolvers Again.

An inquest has just been held at South Shields upon the body of Jane Heywood, aged eighteen years, who was found dying from a pistol shot in the eye in a cabin of the s.s. *Hildegarde* occupied by two of the crew, Olaf Eide, the cook, and A. C. Harvey (seventeen years of age), engineers' steward. It appears that the girl slept on board the ship. Who shot her is not known; both men had revolvers. The coroner committed them both for trial on a charge of manslaughter and said, "It would be a good thing if the possession of revolvers was an unlawful act."

Newcastle-upon-Tyne, Oct. 13th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENT.)

Proposed Clearing-houses for Dead Meat in Scotland.

A MEETING of a sub-committee of local authorities of Scotland was held in Edinburgh last week, at which a draft clause, bearing upon clearing-houses for dead meat, which was to be forwarded to the Government was submitted: "(1) All meat, except dead meat which has been duly inspected in an authorised slaughter-house or at the instance of any other local authority, brought or sent into any borough beyond the boundaries thereof to be sold or exposed for sale and intended for human consumption shall previously to such sale or exposure be inspected by any veterinary inspector of the local authority of such borough or of the local authorities, who may combine in terms of Sub-section 2 for that purpose, and such dead meat so brought or sent into a borough shall be sent for inspection to such place or places as the said local authority or authorities may by notice appoint as places for inspection of such meat; and (2) for the purpose of this section the local authorities of any borough or counties or districts of any county may combine in providing a common clearing house for the inspection of dead meat coming into the district of either of these local authorities, and all expenses incurred shall be deemed to be expenses incurred by them respectively in carrying into effect the purposes of this section." After some discussion it was decided that the sub-committee should meet again, when it was hoped that a larger number of members of the Butchers' Association would be present.

Opening of the Royal Veterinary College, Edinburgh.

This College was opened last week, Lord Provost Macdonald presiding on the occasion. In his opening remarks he referred to the fact that the public would have to look to the veterinary profession to ensure that healthy meat was supplied, and the corporation of Edinburgh had not been slow to recognise that fact. Mr. Finlay Dun, F.R.C.V.S., delivered the introductory lecture of the session. He referred to the wide field which the veterinary profession covered, and dealt with various diseases to which animals were exposed, and also the improvement which had taken place in the general management of domestic animals. He referred also to the stamping-out of pleuro-pneumonia and foot-and-mouth disease, and said that with the preventive measures that had been taken they were not likely to be re-introduced. With reference to swine fever he said that the Board of Agriculture had failed to stamp it out after five years' work, but when they amended their methods and local veterinarians had a free hand in dealing with outbreaks the result was that the disease had already become less prevalent. That experience was a testimony to the practical value of sound veterinary knowledge.

Opening of the Winter Session in Edinburgh.

The medical classes in the University and the various extra-mural schools were opened to-day for the winter session. It is too soon yet to say anything about numbers. There has been considerable annoyance and disappointment at the hours fixed for some of the classes. There seems to be a tendency to absorb an hour for lecture-room work which it was expected would be available for special hospital work under the five years' curriculum. It is to be hoped that every effort will be made to prevent the curtailment of the time available for hospital work.

Oct. 13th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

The Royal Academy of Medicine.

MUCH interest centres on the coming election of a general secretary to the Royal Academy of Medicine in Ireland. It will be remembered that this post has up to the present been filled most effectively by Mr. William Thomson, who has ably edited the Transactions of the Academy for the last sixteen years. As President of the Royal College of Surgeons in Ireland and thus *ex-officio* President of the surgical section, there seemed to be some awkwardness in his continuing to hold also the office of general secretary. Hence the much-regretted resignation of Mr. Thomson. The position is one which is much valued, although the yearly honorarium voted by the Academy is small—namely, £100. The candidates who have up to the present issued addresses to the Fellows are three—Mr. Arthur Chance of the Mater Misericordiæ Hospital, Dr. Richard Hayes of Dr. Steevens' Hospital, and Mr. J. B. Story of St. Mark's Ophthalmic Hospital.

The Richmond District Lunatic Asylum.

The Board of Control have stated that everything possible is being done to forward the erection of the temporary accommodation at Portrane. Mr. G. C. Ashton, the eminent architect, wrote that he believed the contractor was doing everything possible to push on the work. One block he thought would be ready in a month and the second in two months. The epidemic of beri-beri is fortunately of a very mild type. There are at present sixty-seven patients suffering from it, but no death has occurred.

The Rotunda Lying-in Hospital.

The tenure of office of Dr. William Smyly as master of this great hospital has almost expired, and it will be the duty of the Governors to elect a successor to him on the 6th of next month.

Irish Workhouse Reform.

The event of last week in Dublin has been the important conference in connexion with workhouse reform in Ireland, which was held on the 2nd inst. The meeting, which was convened by Lord Monteagle, was a very large and highly influential one, and inasmuch as the Irish workhouses are to a large extent union infirmaries, the medical profession was fully represented. On the motion of his Grace the Archbishop of Dublin (Lord Plunket) the chair was taken by Lord Meath. Lord Monteagle, who acted as secretary to the meeting, read letters from his Eminence Cardinal Logue and from the Roman Catholic Archbishop of Dublin expressing their strong approval of the movement. Lord Meath in a very suggestive speech called attention, amongst other matters, to the present unfair and unsatisfactory mode of election of union medical officers, "into which religious, political, and local considerations so deeply enter." Lord Powerscourt, in proposing the first resolution, said, in reference to the Rathdown Union Workhouse, with which he is connected, that the building and arrangements had been improved in many ways. There was danger, he thought, in making such institutions too comfortable and of inducing idle people to obtain admission who should not be allowed in. The President of the Royal College of Surgeons in Ireland, in seconding the resolution, said that

it seemed to him obvious that the duty of inspecting the workhouses to which the chairman had alluded was not always in the hands of persons qualified to give a judgment upon them. It was most important, he said, that the medical officer at a union should have properly trained nurses, not in his own interest alone, but rather in that of his patients. After speeches from Sir H. Grattan Bellew, the Hon. Horace Plunkett, M.P., &c., a resolution that a provisional committee be appointed to report as to the best means of carrying out the objects of the association was proposed by Lord Clonbrock and passed by a large majority.

The Battle of the Clubs at Cork: Intended Presentation of an Address and Testimonial to Mr. Philip G. Lee on the Occasion of his Marriage.

Mr. Lee's name has been prominently connected with the battle of the clubs at Cork owing to his having held the position of honorary secretary to the Cork Medical Association till quite a recent period. He was one of three local medical men selected to proceed to London for the purpose of urging a combination which would be advantageous, not only to the Cork profession, but also to their medical brethren all over the United Kingdom. The members of the deputation were received by the Council of the British Medical Association. They pointed out the iniquities of the club system as it was known at Cork, and they dwelt on the importance of the profession presenting a united front to the encroachments of the clubs. Whilst claiming at least the moral support of the Council they announced the unswerving determination of the Cork medical men to persist in the struggle in which they had engaged. The subsequent action of the Council and the adoption of a series of resolutions at the Carlisle meeting are too recent events to need recapitulation. The members of the deputation also waited on the Editors of THE LANCET to explain to them their views; and the persistent, energetic, and able advocacy of THE LANCET has since afforded the liveliest satisfaction in professional circles at Cork. Though Mr. Lee discharged very important duties in London it was as the courteous and hard-working honorary secretary to the Medical Association he was best known to the medical profession at Cork. Sending out numerous circulars and writing voluminous minutes entailed an amount of labour which none but Mr. Lee's immediate friends could fully realise. He also carried on an extensive correspondence with the secretaries of associations anxious to avail themselves of the experience of the Cork medical men in their fight with the clubs. Eventually, as the demands on his time became too great, he was obliged to resign, and his resignation was received with much regret. Recently it became known that the date of Mr. Lee's approaching marriage has been fixed, and many of his professional brethren considered the auspicious event would prove a suitable occasion for expressing the high esteem in which he is held and the approval, in some substantial form, of his untiring efforts to maintain the dignity of the profession at Cork, of which he is such a worthy member. Accordingly Dr. N. J. Hobart, President of the Medical Association, voicing the general sentiment, caused a special meeting to be summoned for last Wednesday. The proceedings were most harmonious. It was decided to present Mr. Lee with a testimonial and quite a respectable sum was subscribed in the room. A scale of subscriptions was arranged, according to seniority, and it was considered only fair that the members who had lost their clubs as the result of the fight should not be expected to pay more than the minimum, but very much to the credit of those gentlemen they have announced their intention of contributing double the amount named. A small committee has been appointed to carry out details, and it has been arranged that the presentation shall be made at the annual dinner of the Cork Medico-Chirurgical Society, which practically includes all the members of the Cork profession.

The late Mr. Nicholas Grattan of Cork.

With the consent of his widow the Cork profession has decided to erect a monument over the grave of Mr. Nicholas Grattan, who had attained a European reputation as an orthopædic surgeon.

The Banbridge Board of Guardians.

The Banbridge board of guardians have received a well-deserved snub from the Local Government Board in the following communication read at their last meeting: "The Local Government Board for Ireland have received a resolution of the board of guardians of the Banbridge Union requesting the opinion of the Board as to whether a dispensary committee can enter into an agreement with a medical officer when a new appointment is being made to the effect that should he be temporarily unable, from any cause, to perform the duties of his office he shall pay his substitute; and in reply the Board desire to state that they consider that the proposed agreement would be *ultra vires*, illegal, and not binding on a medical officer." This question arose in connexion with the vacant Loughbrickland Dispensary, the guardians having failed to get the three candidates to sign an agreement before the election that in case any of them were selected they would, in the event of being incapacitated from any reason, pay their own locum tenent.

The Derry Asylum.

At the monthly meeting of the governors, held on Oct. 8th, it was moved that the board of control be asked to proceed without delay with the erection of the new asylum at Gransbaw; to this an amendment was proposed to postpone the scheme for the acquiring of Gransbaw until the governors ascertain whether they could not obtain the Folye College grounds, which adjoin the present asylum. The amendment was lost by two votes and the motion was carried by seven votes to five. It was also decided to request the Board of Control to send a deputation to confer with the governors on the subject. I understand that all over the county Derry the farmers are most determined in their opposition to the building of the new asylum on the grounds of increased taxation, which they say they find impossible to bear, and the present deplorable season, which has been so destructive to the crops, will not tend to weaken their opposition.

Death of Mr. Thomas Fulton, M.D. Glasg., J.P.

I regret to have to chronicle the decease of this well-known medical man in Ulster, who died at his residence, Saintfield, county Down, on Oct. 6th. Dr. Fulton studied at Belfast and at Glasgow, where he graduated in 1863. For a time he acted as house physician at the Union Hospital, Belfast, and afterwards was appointed medical officer of the Saintfield dispensary district. He was also health officer and attendant to the Royal Irish constabulary. Dr. Fulton was a very great favourite and enjoyed a most extensive practice in his own district. He had an apoplectic seizure some time ago secondary to chronic Bright's disease, and he gradually failed in health until his death. The funeral took place on Oct. 9th. Dr. Fulton leaves a widow and a large family.

Salaries of Irish Dispensary Medical Officers.

It is evident that the committees of the Irish dispensaries, especially in the rural districts, are making a determined effort, when opportunities arise, to cut down the salaries of their medical officers. The latest attempt in this direction occurred at a meeting of the Newry board of guardians on Oct. 10th, when a report was read from the secretary of the Mountnorris Dispensary stating that Dr. Young (formerly medical officer) had died and that the committee would elect his successor on Oct. 26th at a salary of £100 per annum. A long discussion followed, in which it came out that the other medical dispensary officers of the union had £120 per annum (the same salary that the late Dr. Young had), and that the law was that a medical officer should be paid such salary as the Local Government Board might from time to time direct and approve of, so that neither the Guardians nor the Dispensary Committee (while they might recommend a certain sum if they thought right) had really the power of fixing the salary. Eventually it was decided to ask the local dispensary committee to reconsider its decision. The thanks of the profession are especially due to one of the *ex-officio* guardians—Professor R. J. Anderson, M.D. R.U.I., J.P.—for the ability and tact which he displayed in looking after the interests of the dispensary medical officers at this meeting on Oct. 10th, and in preventing a paltry reduction of the salary of the incoming medical officer of the Mountnorris district.

Oct. 13th.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

The Association of German Naturalists and Medical Men.

AN account of the history and organisation of this Association has already been given in the columns of THE LANCET in connexion with the report of last year's congress held in Lübeck.[1] This year the Association met for the third

[1] THE LANCET, Oct. 5th, 1895, p. 880.

time since its foundation in Frankfort in compliance with the rule that the meeting shall be held alternately in North and in South Germany. The municipality and the townspeople spared no pains to give to this old and distinguished society a reception worthy of its importance. On Sept. 20th, which was the day before the Association commenced its sittings, the members were invited to attend the laying of the foundation stone of a monument to Dr. Theodor Sömmering, the great anatomist and one of the pioneers of electric telegraphy. The proceedings began on Sept. 21st with a general meeting in the great hall of the "Saalbau" in presence of about 2000 persons, including members, their ladies, and invited guests. The Empress Frederick came expressly from her residence of Cronberg and entered her name in the list of *Theilnehmer* (temporary members). Dr. Schmidt, the well-known laryngologist, who was president of the local committee of organisation, welcomed the Association in the name of the Frankfort societies of medical men and naturalists. He remarked with satisfaction that Frankfort was now for the third time honoured by the presence of the Association, the first occasion having been the meeting in the year 1825, when only 108 members attended and facts like the circulation of the blood and the existence of oxygen were still to some extent matters of controversy. He was sure that the president of a future meeting in this city after another period of seventy years would not be able to claim for his contemporaries an equal advance beyond the present state of natural and medical science. The profession was now in possession of a stock of knowledge which may be extended and perhaps completed, but which can never be declared erroneous. Probably new micro-organisms will be discovered and their action as causes of disease will be regarded from another point of view; but it is impossible that, to take a hypothetical case, the presence of bacilli in tuberculosis and cholera will be denied. Roentgen's discovery will possibly be improved, but posterity will not question the existence of "x" rays. After this inaugural speech Dr. Schmidt resigned the chair to the President of the Association, Professor von Ziemssen, who thanked the local committee for its cordial reception, and expressed the gratification of the meeting at the presence of the Empress and the representatives of the Government and the municipality. It was hoped that Dr. Nansen, the famous explorer, would have attended the meeting, but unfortunately he was unable to be present. A telegram was sent to Professor Galle of Breslau, who fifty years ago was the first to actually behold the planet Neptune. The first of the papers was one on Biology and Hygiene and was read by Professor Buchner. He said that all our hygienic measures aimed exclusively at the prevention of disease, and that our success in this direction brought with it the disadvantage that by diminishing the mortality from epidemics we preserve all without distinction, the weak as well as the strong, and thereby interfere with the law of natural selection described by Darwin. These hygienic measures must, therefore, be completed or supplemented by others calculated to improve the physique of the human race—in other words, to strengthen the body and enable it to resist the unwholesome influence of modern life. Unfortunately of late years we have kept mainly in view the development of the mental powers and have somewhat neglected physical training, but it is a very satisfactory thing that we are already beginning to lay stress upon the regeneration of our bodily qualities, and that gymnastics and athletic sports are becoming more and more popular. School authorities in Germany have hitherto been somewhat opposed to such interference with scholastic routine, but they now understand their obligations in this respect. The hygienic ideal will, however, not be reached until physical training occupies in the school curriculum an equal position with mental work. Alluding to England Dr. Buchner said that from this point of view some other nations are much in advance of Germany, but he hoped to see the time when his countrymen would be similarly proficient in physical training. The other addresses delivered at the first general meeting were by Dr. Lepsius (Darmstadt) on the Glacial Period, and by Dr. Neumayer (Hamburg) on Antarctic Exploration.

At the second general meeting, held on Sept. 26th, Professor Lang (Heidelberg) was elected President and Professor Waldeyer (Berlin) Vice-president. The next place of gathering will be Brunswick. A proposal was made by Professor Waldeyer to the effect that the Association should henceforth meet every second year, and that the intervening years should be reserved for special congresses, but the consideration of it was postponed till next year. Professor Dyck (Munich) then gave an account of the International Catalogue Conference held in London. As a continuation of the scientific catalogue of the Royal Society of London an international catalogue of works in all branches of natural science, edited by an international commission of savants, will be eventually published in London.

The papers read at this meeting were by Dr. Verworn (Jena) on Paralysis and Irritation, and by Dr. Below (Berlin) on the Results of Hygienic Precautions in Tropical Countries. The principal subjects brought forward in the medical sections were: (1) Formaldehyde, by Dr. Rosenberg (Berlin); (2) Water-supply in Ancient Greece, by Dr. Hüppe (Prague); (3) Traumatic Diseases of the Spine, by Dr. Thiem (Cottbus); (4) The Diagnosis of Gunshot Wounds by means of the Roentgen Rays, by Dr. Scheyer (Berlin); (5) Localisation in the Brain, by Dr. Flechsig (Leipzig); and (6) the Preying of Leucocytes on Bacteria by Dr. Buchner (Munich).

After the conclusion of the proceedings the medical members of the Association visited the Hoechst chemical factory, where Behring's antitoxin is prepared. Professor Behring (Marburg) delivered an address describing the details of its production, and the visitors were then shown over the establishment.

ROME.

(FROM OUR OWN CORRESPONDENT.)

"Società Freniatrica Italiana": its Ninth Congress.

FOR the moment the main interest of Italian medicine gravitates to Florence, where the Society of Alienists is holding its ninth Congress. Italy's record in this department of the healing art is exceptionally good, for while contributing not less ably than her contemporaries to the diagnosis and treatment of the insane, she has also made independent studies of mental disease on its prophylactic side and has impressed on the State the duty of "beginning early" to supervise the school-child, and wherever intellectual or moral defect is found to educate the child specially and apart. Year by year her alienist congresses gain in scientific and practical interest, and the present marks a distinct advance on all its predecessors for the variety of its programme and the thoroughness and animation of its discussions. Its seat is the Aula Magna of the Istituto di Studi Superiori; its retiring president Dr. Tamburini of Modena; while its attendance includes such well-known names as those of Morselli of Genoa, D'Abundo of Catania, Tanzi of Florence, Funaioli of Siena, Bianchi of Naples, Lombroso of Turin, Guicciardi and Ferrari of Reggio Emilia, as well as a considerable representation of the profession and the public. Dr. Tamburini delivered the opening address, in which, after an eloquent tribute to the late Professor Verga of Milan, he gave a luminous survey of the medico-psychological field, drawing attention to the ominous fact that Italy has witnessed within the last quinquennium an increase of her insane from 14,000 to 30,000. Psychiatry, he admitted, has nowhere registered much progress in the etiology and therapeutics of mental disease; but a juster sense of its shortcoming now pervades its votaries, new researches are beginning to fructify, and we are on the eve of fresh departures in pathology as well as in treatment. In one particular Italy is awakening from her mediæval lethargy. For example, Florence (as reported in THE LANCET of Sept. 26th, p. 917) is following worthily in the track of her alienist reformer, Chiarughi, and bringing up her asylums to the standard of the nineteenth century. The same city was, moreover, the first among Italian seats of learning to give systematic instruction, theoretical and clinical, in psychiatry, the venerable Professor Bini (to whom he invited the Congress to send a cordial "saluto") being the initiator referred to. The address was characterised by all Dr. Tamburini's mastery of detail and vigour of style, and at its close his successor in the presidential chair was appointed by acclamation—Dr. Tanzi, Professor of Psychiatry at the Florentine Istituto and Superintendent of the San Salvi "Manicomio." Thereafter the proper business of the Congress began, Dr. Algieri of Monza leading off with a retrospect of the work of the "Società Freniatrica Italiana" from 1894 to 1896, and Dr. Ellero, of Milan, and Dr. Bianchi, of Naples, following with special papers, the former, on the Scientific Criteria for Determining the Civil Capacity of the Insane and on the Relations between Civil Incapacity and Penal

Imputability; the latter on Partial Lesions of the Brain, leading in certain Subjects to Profound Paraphasic Dementia with loss of Civil Capacity. On both of these able theses and the discussion they evoked I may have something to say in another letter.

"A Stoic of the Woods."

There has just died near Mantua an eccentric character known to all the neighbourhood as the "Om dal Bosco" (the local *patois* for "Uomo del Bosco" or Man of the Woods), whose mental condition is described as one of "mania errabunda" and "involutionary regress to the savage state." He was possessed of land and a considerable fortune; never left the district in which his property lay; dressed, as a local biographer puts it, "in costume Adamitico," with the exception of a solitary bandage round him to represent the fig leaf of his prototype; and lived almost exclusively on raw meat and vegetable accompaniments also uncooked. He was a good neighbour and a kind master in spite of his habits. These were modified by a restlessness which took him out of his hermit's couch several times during the night to perambulate the country, half-naked, in his carriage. For twenty years he never washed, and he invariably drank out of the same glass, which he would never allow to be cleaned. Nothing but his harmlessness, his amiability, and his excessive popularity with the country folk, who would have resented any interference with him, kept him out of a lunatic asylum. On his death the other day his will was found to contain numerous and handsome bequests to charitable objects, as well as liberal allowances to his domestics. To his relatives he left not one farthing—not that he professed to dislike them, but because they had once tried to put him under constraint. When his full biography comes to be written it will add another to the not inconsiderable roll of cases in which a retrogression to the primal state so far as mode of life and personal habits are concerned has co-existed with no small intellectual shrewdness and a benevolence rarely encountered in more conventional types. This "Stoic of the Woods" was very far indeed from being "a man without a tear" (to continue Campbell's well-known line), and leaves behind him an amount of popular gratitude which many a millionaire might envy. His name was Luigi Pizzi; his estate was called Mantuanella, and he was in his seventy-fourth year when he died.

An Anecdote of Moritz Schiff.

The Italian press, lay as well as professional, teems with biographical detail regarding the late Professor Schiff of Geneva, whose noble services to the country's medical schools are all the more remembered from his having been driven from his Florentine chair by an anti-vivisectionist agitation largely fomented by "zoophilists" and homœopathists. His first wife, according to one biographer, was a Rothschild, who made it a condition of his sharing her fortune and faring sumptuously every day that he would absolutely renounce his experiments on living animals. For a month after marriage he tried to accept the situation but could stand it no longer, and at the end of that time he had accepted the simpler life with the return to the laboratory.

Oct. 10th.

VIENNA.

(FROM OUR OWN CORRESPONDENT.)

Carcinoma of the Stomach.

DR. HAMMERSCHLAG has just published a highly interesting pamphlet on carcinoma of the stomach, wherein he calls attention to the fact that serious derangements in the function of the stomach may be brought about by histological changes in its mucous membrane. In the contents of a carcinomatous stomach collected one hour after a test breakfast there may be found abundant lactic acid and numerous long bacilli, but there is no free hydrochloric acid and there is an absence or diminution of the albumin-digesting principles. Moreover, the peristaltic action is interfered with, and though there may be no pyloric stenosis the food is no longer kept in motion. Dr. Hammerschlag has observed forty-two cases; he classifies them according as pyloric stenosis is present or absent, and in the next place according as secretion is entirely arrested or only diminished. The last group is characterised by its symptoms and may be divided into those cases in which the predominant features are respectively either pain or dyspepsia. In twenty-seven out of the forty-two cases there were grave disturbances, and there were only four cases in which secretion was normal. The absence of hydrochloric acid is of no diagnostic value; pepsine was diminished in two-thirds of the cases, a symptom which does not in any way characterise carcinoma, for it may also occur in atrophy of the mucous membrane and in chronic catarrh. According to Dr. Hammerschlag the increased formation of lactic acid is of great importance and is produced by peculiar bacilli which are to be found only in gastric juice containing lactic acid and which possess the faculty of producing lactic acid from sugar and maltose. No doubt these organisms occur normally in the digestive tract, but they produce lactic acid only if their development is promoted by perverted chemical action. Some authors believe the lactic acid fermentation to be due to the absence or diminished supply of the free hydrochloric acid and also to the contents of the stomach not being sufficiently kept in motion, but Dr. Hammerschlag has seen cases where, in spite of the existence of the above conditions, there was no lactic acid fermentation and the albumin digestion was normal. He therefore believed the ferments of the stomach to be of great importance in the lactic acid fermentation and considered that there were three predisposing causes—viz., absence or diminished formation of free hydrochloric acid, decrease of the ferment, and insufficient peristaltic action. Of these symptoms, the first which occurs is the decrease of hydrochloric acid, then that of pepsine, and finally the increase of lactic acid; but in cases of carcinoma originating from a gastric ulcer the chemical action may be normal to the last. Histological examination of the mucous membrane in cases of lactic acid formation shows atrophy of the glandular elements which are supplied with cylindrical epithelium.

Antitoxin Treatment of Diphtheria.

In the report of the Anna Hospital for Children Professor Wiederhofer has given a full account of the antitoxin treatment of diphtheria in that institution during 1895. The patients admitted with diphtheria were 749 in number; serum treatment was employed in 712 cases, among whom there were 131 deaths, being a mortality of 18·4 per cent. Of these deaths twenty-four occurred within the first day, and if these cases be excluded from the computation the mortality is reduced to 15·5 per cent., whereas among 7149 cases of diphtheria admitted from the year 1867 to the year 1894 the mortality was 43 per cent. Intubation was performed in 105 cases, among whom there were 8 deaths (7·5 per cent.); intubation and tracheotomy were performed in 90 cases, with 52 deaths (57·7 per cent.); primary tracheotomy was performed in 34 of the most urgent cases, with 24 deaths (70·5 per cent.). Among the 712 cases in which serum was employed 229 received operative treatment in some form or other and 84 of them died (3·66 per cent.).

Hereditary Syphilis.

In the *Klinische Wochenschrift* Dr. Zappert gives a full account of the various publications on hereditary syphilis which appeared last year; he also makes special reference to the symptomatology of hereditary syphilis as well as to the subject of hereditary syphilis with deferred symptoms. According to Neumann, the infection of syphilis from the mother is well ascertained, and there may be either (1) infection of the mother before conception; (2) infection and conception at the same time; or (3) infection subsequently to conception—the latter being dangerous only in the first months of pregnancy. The occurrence of infection subsequently to conception has been denied by Finger, but Neumann and Lang believe it to be satisfactorily made out. Syphilis existing in the father may produce either intra-uterine death of the fœtus or debility without any special symptoms of syphilis, or it may even fail to give rise to any symptoms at all. Dr. Finger believes that in the first case the seminal fluid possesses virulent qualities, and that in the second it has undergone deterioration without being actually virulent, whilst in the third it is of normal quality. Neumann, however, considers the seminal fluid to be infectious in its relation to the ovule. Syphilis of the fœtus may have the following effects on the mother: (1) she may acquire syphilis without primary symptoms (conceptional syphilis); (2) she may retain her health for a time, eventually developing tertiary symptoms (conceptional syphilis with deferred symptoms); or (3) she may acquire an immunity against syphilis. The pathognomonic signs of syphilis hereditaria tarda as given by Hutchinson have been refuted by Neumann, who accepts the symptoms described by Fournier—viz., greyish colour,

infantilism, deformities of the skull and the nose, the peculiar form of both shin bones, and scars at the angles of the mouth and the lips. Escherich has recently described a case where the spleen was enlarged.

Oct. 11th.

BUDAPEST.

(FROM OUR OWN CORRESPONDENT.)

The Commemoration of Jenner in the Budapest Medical Society.

THE Budapest Medical Society held a special meeting on Sept. 17th to commemorate the immortal merits of Edward Jenner, the occasion being the centenary of his great discovery. Professor A. Högyes, the founder and director of the Budapest Pasteur Institute, in the course of an eloquent discourse on Jenner's life and work, said with regard to Jenner's experiment upon the boy named Phipps: "This apparently simple experiment soon acquired historical importance in its practical as well as its scientific bearings—practically, because it substituted innocuous vaccination for the variolisation formerly employed, and thus rendering the prophylactic measures easy of access all over the world it became a potent means to save millions of lives; scientifically, because the result of the experiment took a strong hold on the minds of many learned men and aroused the desire to seek in this direction for weapons of defence against other infectious scourges." Professor Högyes then showed a copy of Jenner's book ("An Inquiry into the Causes and Effects of the Variolæ Vaccinæ, &c.," by Edward Jenner, London, 1798) belonging to the library of the Budapest Medical Faculty, which might be so far considered a Jenner relic, as it contains Jenner's dedication in his own handwriting to Blumenbach, at that time professor in Göttingen. The learned lecturer next proceeded to compare the work of Pasteur with that of Jenner, giving a thorough and clear survey of the services rendered to mankind by these two of its greatest sons, and emphasising the fact that Jenner's work was the foundation stone on which Pasteur and others could build. Professor Högyes closed his brilliant lecture with the following striking words: "In the last exhibition of the Paris Salon we noticed a picture which is destined to adorn the walls of the Sorbonne. This picture represents Pasteur in his small laboratory of the École Normale. He stands amidst all sorts of retorts and chemical appliances, bending over a microscope and writing notes. The two sides of the picture are occupied by allegorical figures of Genius and Patience, while the background shows the figure of Science bestowing relief on suffering humanity. The picture is entitled *La Science et l'Humanité*. For my part I cannot help seeing in the background of the laboratory the vigorous figure of Jenner looking upon Pasteur as upon the man who endowed with reality all his cherished ideas and presentiments. The genius of Jenner opened up new paths in these dark fields of investigation, the brilliant work of Pasteur elucidated them in their whole extent. The spirits of Jenner and of Pasteur are the ever-radiant guiding stars to hosts of strenuous and earnest workers who endeavour to advance knowledge in order to protect mankind against the plague of infectious diseases." Dr. J. Körösi, the well-known Hungarian statistician, then delivered an elaborate lecture on the Statistical Proofs of the Protecting Power of Vaccination, reviewing all the arguments which have been brought forward both in favour of vaccination and against it. I deeply regret that considerations of space do not allow me to fully enter into the details of his most interesting exposition. He showed conclusively that through compulsory vaccination the morbidity and mortality from small-pox had largely declined, and that the spread of other diseases (with the exception of erysipelas and some other affections of the skin) had not been fostered by vaccination. The meeting closed with a report on the development of vaccination in Hungary, drawn up by Dr. G. Hainiss. Vaccination was first performed in Hungary as far back as the year 1779; the first book on vaccination in Hungary was written by Francis Bene, and left the press in the year 1800.

Letters from Lister and Virchow.

Among those men of science who have been elected Honorary Doctors of the Budapest University on the occasion of the Millennium the names of Sir Joseph Lister and Professor Rudolf Virchow were prominent. These gentlemen, after having received the richly ornamented diplomas, sent the following letters to the Rector of Budapest University. Sir Joseph Lister wrote:—

"London, Aug. 5th, 1896.

"MY DEAR SIR,—The magnificent diploma of the Honorary Degree conferred upon me by your University has duly reached me, and I beg to repeat my deep sense of the great honour thus bestowed upon me.

"Believe me, very respectfully yours,

"JOSEPH LISTER."

Professor Virchow wrote the following:—

"Rectori magnifico almæ ac celeberrimæ Regiæ scientiarum universitatis Hungaricæ. Gratiam quam maximam ago quod nomen meum inter ea recipere voluerunt quæ in memoriam solemnis festivitatis millennariæ insolito honore ornaverunt. Accepi splendidum diploma Doctoris honoris causa erecti. Servabo hoc signum æstimationis vestræ quasi exhortationem perpetui fœderis quo amicis Hungariæ et amicis scientiarum conjunctus ero.

"RUDOLFUS VIRCHOW."

"Berolini, die X m. Augusti, MDCCCXCVI."

Oct. 8th.

AUSTRALIA.

(FROM OUR OWN CORRESPONDENT.)

Leprosy in Sydney.

THE Government of New South Wales has appointed a board of inquiry, consisting of Dr. W. C. Wilkinson, Dr. P. S. Jones, and Dr. F. H Quaife, to report as to whether a European detained at the leper lazarette is suffering from leprosy in such a form as to warrant his seclusion. It will be remembered that Dr. Taylor, the resident superintendent at the lazarette, is of opinion that the patient is not a fit subject for detention, while Dr. Ashburton Thompson, the President of the Board of Health, maintains that he is. All the Chinese lepers, nineteen in number, detained at the lazarette have been shipped back to China along with seven from Queensland. In their own country these lepers will have personal liberty, and as they went of their own free will the Government are only too glad to get rid of them. There are still nineteen lepers confined at the Sydney lazarette, fourteen of whom are Europeans. The lepers sent away will be carefully isolated on the voyage, and when they arrive in China will have sufficient funds at their disposal to enable them to reach the districts to which they belong.

Coroners and Post-mortem Examinations at Hospitals.

A patient at the Broken Hill Hospital, suffering from an injury to the spine, having died, the coroner ordered an outside medical practitioner to make a post-mortem examination. The house surgeon considered that he should have been asked to make the examination, and by way of protest anticipated the judicial examination and removed the affected portion of the spine. His zeal in upholding what he regards as the privileges of house surgeons will probably land him in serious trouble. Fortunately there is no question as to the treatment of the patient, whose death was apparently the inevitable consequence of his injuries.

Annual Address at the University of Sydney Medical Society.

This year the Medical Society of the Sydney University (composed of the medical students attending lectures) made a new departure by inviting Mr. Fitzgerald, the well-known Melbourne surgeon, to give the annual address. He chose as his subject Deformities of the Face and Mouth, and after giving an account of their origin from an embryological standpoint referred in some detail to the various modifications in operative procedure he had devised for remedying these defects.

Cases of Hydatid Disease.

In the August number of the *Australasian Medical Gazette* several interesting cases of hydatid disease are recorded by Dr. Poulton and Dr. Verco. In three of the cases related by Dr. Poulton hydatids had been removed by incision several years previously, and the second cyst was in the immediate neighbourhood of the first cyst. In two other cases the effects of the parasite caused perforation of the hollow viscera, the urinary bladder in one and the stomach in the other, and repair occurred without recourse to plastic operation. Two cases of hepatic cysts were treated intra-peritoneally with marked success according to the method suggested by Mr. Hamilton Russell, the peritoneum clearly absorbing without difficulty the serous, and even bile-stained serous, fluid exuded from the adventitia, and in this respect contrasting markedly with

a case of extra-peritoneal cyst of the pelvis treated in the same manner, in which the adventitial sac became over-distended with serous fluid and eventually suppurated. Another case was very unusual in the multiplicity of cysts present, and from the fact that the third rib was infiltrated with minute cysts, while larger cysts occupied the upper portion of the lung and had previously been removed from the liver. All the cases reported made excellent recoveries. Dr. Verco raises the question of the possibility of differentiating pleural from pulmonary cysts, and asks whether when a cyst grows in the substance of the lung a communication always exists between the cavity in which it lies and the bronchial tubes. In one case which he records the ribs were eroded from the pressure of an intra-thoracic cyst, a very unusual occurrence, and, moreover, the essential cyst of the hydatid was in immediate contact with the bare eroded bone. He suggests that the reason bone hydatids have no adventitia is that the pressure between the growing cyst and the unyielding bone is too great to permit soft tissue between them to live. In another case recorded a hydatid cyst inside the thorax pressed its way out between the ribs and simulated an extra-thoracic cyst. In the diagnosis of the site of hepatic cysts Dr. Verco points out that when the hydatid is in the upper portion the liver dulness is increased upwards as well as often projecting into the epigastric region, but a cyst in the lower part of the liver does not push the organ up. When practicable he prefers operating through the thorax even when a cyst can be reached from the abdomen, because it is more apt to be adherent and so can be drained without opening either the pleural or peritoneal cavity; the thoracic opening gives better drainage and permits the liver to retract to its normal position as the cavity contracts, whereas by the abdominal incision it is anchored to the wound and cannot ascend. He also objects to the intra-peritoneal method owing to the great difficulty of ensuring complete removal of all portions of cyst, and a portion of endo-cyst left may contain immature daughter cysts which will subsequently develop; or if it dies it will act as an irritant. In the August number of the *Intercolonial Medical Journal of Australasia* Dr. Jeffreys Wood records an interesting case of hydatid of the spinal canal in a child aged ten years. The chief symptoms were pain in the back over the lower cervical vertebræ, with tenderness on deep pressure over the fifth, sixth, and seventh cervical vertebræ; pain shooting down both arms, chiefly the left; wasting of the right arm of two and a half years' duration; wasting of the left arm and symptoms of a total transverse lesion of the cord of about three months' duration. These symptoms pointed to some gradually increasing pressure first on the right side of the cord and gradually involving its whole thickness. The fact that the biceps could be contracted voluntarily while the triceps was completely paralysed indicated that the nucleus of the fifth cervical nerve was above the lesion. The laminæ of the fifth vertebra were removed and on the right of the cord a swelling, tense and fluctuant, was found extending downward. The laminæ of the sixth and seventh vertebræ were then removed and the dura mater opened, and the cyst found to be adherent and shut off from the subdural space; it was opened and hydatid fluid and daughter cysts escaped. At the bottom of the cavity the bodies of the sixth and seventh cervical vertebræ were eroded. Cerebral meningitis unfortunately set in which ended fatally a fortnight after the operation.

Abscess of the Lung successfully treated by Incision and Drainage.

Dr. E. L. Luther records a case of a man twenty-seven years of age who had been ill for six weeks with cough, emaciation, and profuse purulent expectoration. Night sweats were present, the left chest was retracted, and dulness was marked all over the left lung, but especially at its base, where breath sounds were absent. The temperature was 103° F. An incision was made over the seventh left rib midway between the spine and the axillary line and a portion of the rib resected. The pleura was adherent and the lung broke down under the pressure of the finger and an abscess was opened, half-a-pint of pus and broken-down lung being evacuated. Drainage-tubing was inserted and removed in a fortnight and the patient made a perfect recovery.

Death of Mr. Thomas Chambers.

By the death of Mr. Thomas Chambers Australia has lost one of its leading gynæcologists. He had had bad health for years, and it was owing to this that he came to Sydney from London in 1882. He speedily attained a high position, being appointed Lecturer in the Sydney University on Midwifery and Gynæcology, and elected on the staff of both the Sydney and Prince Alfred Hospitals. He was a native of Yorkshire, and became a Member of the Royal College of Surgeons of England in 1858. He was also a Fellow of the Royal Colleges of Surgeons and Physicians of Edinburgh. In London he held the positions of physician to the Chelsea Hospital for Women and consulting physician to the Western Dispensary, Westminster. He had a very large practice in Sydney and was very highly esteemed both by the profession and the public. He was treasurer of the Intercolonial Medical Congress in 1892, and was President of the New South Wales Branch of the British Medical Association. He was remarkably successful as an abdominal surgeon and contributed several papers on gynæcological subjects to the local medical journals. So lately as July 31st he took part in a discussion on puerperal eclampsia, and he gave his last lecture at the Medical School on Aug. 19th, but felt ill on his return home and was found to have developed an attack of bronchitis, which ended fatally on Aug. 24th. Mr. Chambers was remarkable for an extremely sympathetic manner which endeared him to his patients, as well as for his conscientious thoroughness in all his work. He had reached his sixty-eighth year and was twice married. The funeral, by his express wish, was very quiet and private, but a very large number of floral wreaths were forwarded by private and professional friends and the students and nurses of the hospitals to which he was attached.

Aug. 30th.

THE INTERNATIONAL CONGRESS OF GYNÆCOLOGY AND OBSTETRICS.

(FROM A CORRESPONDENT.)

THE second International Congress of Gynæcology and Obstetrics, which was held in Geneva from Aug. 31st until Sept. 5th, proved to be most successful. It is fashionable amongst some at the present time to decry such meetings on the ground that the scientific work brought forward is, as a rule, inferior and that they afford opportunities for pushing members of the profession to advertise themselves. Neither of these charges can, however, be brought against this recent Congress in Geneva; but even if they were to a certain extent true I think such gatherings would still have a great value in that they afford opportunities for men from all parts of the world to meet together. In this way each can weigh the "personal factor" in the other, and, as a result, after meeting and talking to a person whose books or papers one may have read, it may be concluded that in one case a man's statements may not be worth the reliance formerly placed in them; while, again, in another case, one may be inclined to value a writer's works even more highly after an opportunity of seeing him and, it may be, of talking to him on the subject in which he has taken a special interest. No more delightful place could be selected for a congress than Geneva, and its charm this year was enhanced by the fact that a very beautiful exhibition was being held in the city which was exceptionally well worth visiting. Again, Geneva forms a capital point at which one may end or begin (as many of those attending the meetings did) a tour of Switzerland, "the playground of Europe."

The opening meeting of the Congress took place in the great hall of the University on Sept. 1st, when addresses were delivered by M. Lachenal, the President of the Swiss Confederation, who took a deep interest in the Congress, and whose geniality, courtesy, and sociality made a marked impression on those who had the honour of meeting him at Geneva, and by M. Richard, the head of the Department of Public Education in the Canton of Geneva. The President of the Congress (Professor Auguste Reverdin) then gave his inaugural address, and after several of the delegates and those chosen to represent foreign societies, as well as Dr. Bétrix, one of the secretaries, had spoken, the Congress proceeded to the consideration of the first subject—the Treatment of Pelvic Suppuration. This question was introduced in very able communications by Dr. Bouilly (Paris) and Professor Sänger (Leipzig), while Dr. Howard Kelly, the third joint reporter, had his paper read, in his unavoidable absence, by the Secretary-General for Gynæcology. An extremely interesting and lengthened discussion followed, in which the following took part: Dr. Hartmann, Dr. Richelot,

Dr. Péan, Dr. Paul Reynier, Dr. P. Segond, Dr. Pichevin, Dr. Doleris (all of Paris), Dr. Henrotin (Chicago), Dr. Delagénière (Mans), Dr. Doyen (Rheims), Dr. Henrotay (Antwerp), Dr. Mangin (Marseilles), Dr. Adenot (Lyons), Professor Doderlein (Leipzig), Dr. Duret (Lille), Dr. Acconci (Genoa), and Dr. Coromilas (Calamata). After listening to this most elaborate and complete discussion of the Congress I think one is warranted in concluding (1) that in the treatment of pelvic suppuration the most important point is to diagnose the seat of the pus; (2) that there is no one method of treatment applicable to all the cases—each case must be treated on its merits; (3) that in certain cases the treatment known in France as Laroyenne's method, that is, vaginal incision and free divisions of the collections of pus, followed by drainage, gives the best results; (4) that in other cases, especially when there are unilateral collections of pus and the patient is young and hence has a chance of further pregnancies, cœliotomy is the best method; and (5) that Péan's operation—i.e., colpo-hystero-salpingo-oöpherectomy—is indicated when there is serious suppuration of the adnexa, pelvic peritoneum or cellular tissue on both sides, combined with a distinct uterine disease (myoma, carcinoma, or fungous endometritis) with profuse hæmorrhage. The radical vaginal operation is evidently more popular in France than in Germany.

The next gynæcological subject under discussion was the Surgical Treatment of Backward Displacements of the Uterus. Very interesting introductory papers were read by Professor Küstner (Breslau), Dr. Polk (New York), and Professor Pozzi (Paris). The outcome of these communications and of the discussion which ensued may be put as follows: (1) that there are two kinds of backward uterine displacements—those which are mobile and those which are adherent; (2) that for the first variety the curing of any metritis (curettage), the repair of the perineum (if lax or torn), the adjustment of a proper fitting metal pessary, and the wearing of an abdominal bandage are, in the great majority of cases, all that are required, but in a few Alexander's operation may be needed; (3) that in the adherent backward uterine displacements it is the lesions (mainly in the Fallopian tubes and ovaries) causing the displacement which must be treated; (4) that in the simpler cases, after opening the abdomen, merely freeing these adhesions, with ignipuncture or partial resection of the ovaries, is all that is needed; and (5) that in the more severe varieties coeliotomy may be required, whereas, if combined with bilateral extensive lesions of the adnexa, there are chronic metritis and enlargement of the uterus, vaginal hysterectomy may really give the best results. Some speakers advocated in these cases of fixed backward uterine displacements (after freeing the adhesions) Alexander's operation or hysteropexy; but it is unfortunate that the latter method may be attended with subsequent inconvenience in pregnancy and childbirth, and the attachment of the uterus to the abdominal wall tends to lengthen and, as was pointed out, may form a band which has actually caused death by strangulating the intestine. The whole tendency of the discussion was against vaginal fixation of the uterus. Dr. Péan, however, brought before the Congress a new method of treating these cases. In the majority of cases he first performs a supra-vaginal excision of the cervix, which enables him to reach the spur which is formed at the point of greatest flexion of the uterus, and subsequently to open with greater facility the fornices and to detach retro-uterine adhesions. This may be done a few weeks before the subsequent steps of the operation, and if at the same time there is any relaxation of the pelvic floor a perineorrhaphy is of advantage. When the surfaces made in this preliminary operation are healed Dr. Péan makes an incision (longitudinal or transverse) into Douglas's pouch wide enough to enable him to examine with the forefinger the whole of the posterior surface of the uterus, to separate adhesions, and in case there are tumours of the adnexa to remove them. The mobility of the uterus being thus restored he opens the anterior fornix, removes the peritoneal lining from the posterior surface of the bladder and the front of the uterus. He then applies (vertically or transversely) from three to five silkworm gut sutures between the cellular lining of the bladder and that of the anterior wall of the uterus. The knots are cut close and the vaginal wound is closed with superficial silkworm stitches, care being taken that before being tied the body and fundus of the uterus are in a proper position. Dr. Péan claims for this operation, which he performed for the first time three years ago, that by it the endometrium is relieved of the central spur which interfered with conception, that the adhesions holding down the uterus are destroyed, and that they cannot be re-formed, as the union by sutures of the uterus to the bladder keeps the womb in a forward position. Further, after this operation no trouble arises in a subsequent pregnancy. If, however, there is very serious inflammatory disease of the uterus and adnexa Dr. Péan recommends vaginal hysterectomy with *morcellement*.

The last gynæcological subject discussed was the method of closing the abdomen which seems the best for preventing abscesses, eventrations, and ruptures. Dr. Bantock (London) and Professor La Torre (Rome) opened the discussion; Dr. Doleris (Paris), Professor Rapin (Lausanne), Dr. Byford (Chicago), Dr. Laroyenne (Paris), Mr. Alban Doran (London), Dr. Condamin (Lyons), Professor Arnam (Munich), Dr. Von Ott (St. Petersburg), and Professor Rein (Kiew) also spoke. There was considerable diversity of opinion as to methods, but in the main the indications for successful closing of the abdomen would seem to be cleanliness, as little injury of the tissues as possible, careful coaptation of all the various portions in the edges of the wound, the keeping of any foreign body out of the lips of the wound, and not tying the sutures too tight. Some advocated the median incision in the linea alba, others would make it in the muscle, while others again thought a transverse incision (Kreuzschnitt) at the distance of three or four centimetres from the symphysis pubis gave the best results. In young, robust, nulliparous women, as pointed out by Dr. Bantock, simple interrupted sutures passed through the whole of the abdominal wound give satisfactory results, while in thin, emaciated, multiparous women it is wiser to suture in layers. Mr. Doran said we could not assert the non-occurrence of hernia before the elapse of at least two years, and he thought one of the reasons which in England favoured the development of ventral protrusion was the tendency amongst operators there to take up in the loop of the suture too much peritoneum, which thus becomes interposed between the other layers of the abdominal parietes.

There were two obstetric questions put down for discussion at the Congress. The first was the Comparative Frequency and most Common Forms of Contracted Pelvis met with in different Countries, Groups of Countries, and Districts. Reports for this subject were submitted by Dr. Fancourt Barnes (London), Professor Fochier (Lyons), Professor Rein (Kiew), Professor Kufferath (Brussels), Professor Treub (Leyden), Dr. Pestalozza (Florence), Dr. Lusk (New York), and Professor Pawlick (Prague). The discussion was somewhat uninteresting to English-speaking members, as the statistics both from England and America showed that cases of contracted pelvis were not very common. Thus Dr. Fancourt Barnes reported that at the Royal Maternity Charity of London during ten years there were out of a total of 38·065 cases 150 of flat pelvis with a true conjugate less than 9·5 centimetres, and 45 cases of generally and regularly contracted pelvis with a true conjugate of less than 10 centimetres. There have been 74 cases of version, 196 of forceps, 15 craniotomies, and no Cæsarean sections; while Professor Lusk of New York pointed out in his report that in the native population of his country pelvic deformities are extremely rare. For the most part they consisted of (*a*) minor degrees of simple flattened pelves, (*b*) the justo-minor pelves, and (*c*) varieties due to kyphosis and scoliosis. The rachitic pelvis is almost unknown, and osteomalacia did not occur at all. The other obstetric question which the Organising Committee arranged for discussion—the Treatment of Eclampsia—gave rise to one of the most thorough and well-sustained debates at the Geneva Congress. Lengthened communications were read by the following members who had been appointed to open the discussion: Dr. Charpentier (Paris), Professor Halbertsma (Utrecht), Professor Mangiagalli (Milan-Pavie), Professor Byers (Belfast), and Professor Parvin (Philadelphia). The following also spoke: Professor Tarnier (Paris), Dr. Lindfors (Upsala), Professor Queirel (Marseilles), Dr. Bossi (Genoa), Dr. Pamard (Avignon), Professor Morisani (Naples), Dr. Cortejarena, Dr. Pasquali (Rome), Professor Fochier (Lyons), and Dr. Audebert (Bordeaux). Although the pathology of eclampsia is on a most unsatisfactory basis the prevailing view of the speakers was that it was due to a toxæmia peculiar to pregnancy. Dr. Lindfors (Upsala) showed some beautiful microscopic sections exhibiting changes in the liver cells and also emboli proving the existence of hepatic cells in the floor of the cardiac cavities of a woman who succumbed to eclampsia. Professor Byers (Belfast) drew special attention to the part played by the fœtus in the causation of eclampsia, the morbid poison, in

his opinion, being in part elaborated by the mother, but also by the fœtus. In support of this view he showed that when the child dies the danger for the mother is much diminished or overcome, that there is a greater tendency to convulsions in twin and triplet pregnancies, and that while the maternal mortality is greatest when the eclampsia sets in during pregnancy, it is less during labour, but lowest of all when it occurs for the first time after the birth of the child. The fœtus in development forms waste products which the mother has to eliminate, and in certain cases she has too much to do in getting rid of the waste products of both herself and of her child. By the child's death sometimes a catastrophe to herself is averted. Professor Morisani (Naples) also dwelt on this point, and stated that before deciding on obstetrical intervention it was necessary to ascertain whether the child was alive or not, as he had on several occasions proved that the death of the child put an end to the convulsions and the albuminuria. He had 4 cases under his observation conclusive on this point; and Dr. Pasquali (Rome) said he had found that the death of the child checked the eclampsia, and he significantly added that this fact suggested the question whether the fœtus does not play an important *rôle* in the etiology of this dangerous complication. Professor Tarnier, the head of the Paris Obstetric School, struck a right note when he said eclampsia was a disease which was full of surprises, cases the most benign in appearance frequently turning out badly, while, on the other hand, the very reverse was often true. It was, therefore, he thought, impossible to settle upon one treatment for all cases of eclampsia. In reference to the prophylaxis, I think all who took part in the discussion were in favour of milk diet, which in the case of an albuminuric pregnant woman is the treatment *par excellence*. Others, with this dietary, advised purgation, diaphoresis, and intestinal antisepsis. The French School of Midwifery specially urged this milk diet, as Dr. Charpentier said it is never too late to put the patient on this diet, and by it the quantity of the toxin can be diminished. Even in a number of patients actually suffering from eclampsia the attack yielded to the injection of milk into the stomach by the œsophageal tube as recommended by Tarnier. As long as a pregnant woman has albuminuria she should be kept on milk diet, and it should be continued for a week or two after delivery. Œdema in a pregnant woman, even in the absence of albumin in the urine, calls for milk diet. In the treatment of the convulsions there was considerable diversity of opinion; the French speakers recommended bleeding (in a strong cyanotic patient), chloroform inhalations, chloral per rectum, milk by the stomach administered, if necessary, by the probang, and hypodermic injections of artificial serum (salt solution) to set up diuresis. Professor Parvin (Philadelphia) spoke of the very great results obtained in America by the use of the tincture of veratrum viride (which was first used in this complication by Dr. Baker of Enfanta, Alabama, in 1859), while Professor Byers (Belfast) recommended the hypodermic injection of morphia, half a grain to be given when the fits commenced, followed by a quarter of a grain as often as is found necessary to control the fits, the idea being simply to keep the convulsions in check. The patient is to be kept on her side (not on her back), with her head low to prevent the entrance of fluids into the larynx or trachea from the mouth, and in this way an effort is made to prevent œdema of the lungs, one of the most frequent conditions seen in fatal cases of eclampsia. Professor Byers said he had better results in the treatment of the fits with morphia (the method originally introduced by G. Veit) than with chloral, and Dr. Smyly, the present master of the Rotunda Hospital, had supplied him with the following statistics from that institution. There were 30 cases of eclampsia, of which 4 occurred before labour, 22 during, and 4 after delivery. The first 17 were treated with chloroform; of these, 6 mothers and 11 children were lost. Since 1893 at the Rotunda Hospital chloroform has not been used except during instrumental delivery, and they have had 13 cases with 2 maternal and 8 fœtal deaths; 1 went out undelivered. The treatment adopted since 1893 was by morphia. In reference to the obstetric management of eclampsia two diametrically opposed views were put forward at the Congress. From the French obstetricians came the recommendation, in the absence of labour, to treat the convulsions, while if the convulsions occurred during labour and the os was dilated or easily dilatable delivery may be effected by forceps or turning followed by extraction when the child is living, by cephalotripsy, basiotripsy, or cranioclasm when the child is dead. Cæsarean section and "accouchement forcé" are to be absolutely rejected as usual methods for the treatment of eclampsia; they are never to be used—such is the French teaching—except as a last resource in desperate cases. On the other hand, Dr. Halbertsma (Utrecht) said that in 26 out of 48 cases of eclampsia (on which his report was based) a grave prognosis had been arrived at; active intervention was taken in 10 with 8 recoveries, while in all the other 16 cases except 1 the patient died. Hence he recommended that delivery should be induced more frequently than is usually done. At the end of pregnancy he preferred Cæsarean section; in the beginning of labour he would make incisions in the cervix and follow Dührssen's method. He said the accoucheur should remember that if the patient were not pregnant she would not have eclampsia, and the principle on which he must be guided in every case of eclampsia was this, "Do the convulsions involve greater risk to the woman than induced labour?" Professor Morisani (Naples) said between these ultra-conservative and extreme radical views there was a "golden mean." He objected to interference in the early months, but at the eighth month or at term he saw no objection to interference. He advocated the use of the hand as a better and safer instrument for dilatation than any other. He objected to Dührssen's method of free incisions because he feared rupture of the uterus; hence in cases where a decided surgical intervention is called for he had recourse to Cæsarean section. Professor Tarnier's contribution to the discussion was most valuable; he presented a statistical table extending from 1834 to 1896, showing 312 cases of puerperal convulsions with 116 deaths, with a maternal mortality of 37 per cent. and an infantile mortality of 60 per cent. During these years there have been in turn four professors using the most varied methods of treatment at the Paris Obstetric Clinic. Professor Tarnier's own statistics cover a period of seven years (from Jan. 1st, 1889, to Jan. 1st, 1896), during which he had 40 cases of eclampsia with 9 deaths, or a small mortality of 22·5 per cent. He divided these seven years into two periods, the first embracing the time from 1889 to 1891 inclusive, and in this there were 18 cases of eclampsia with 7 deaths, a mortality of 38·8 per cent.; during this period he used chloroform, chloral, and milk diet, while venesection was very rarely done. In the second period, from 1892 to 1896, he had 22 cases of convulsions with 2 deaths (a mortality of 9 per cent.), and a fœtal mortality of 77 per cent. Professor Tarnier said the markedly better results in the second period were due to the new treatment he used, based on Dr. Chambrelent's researches on the toxicity of the blood in eclampsia. This new treatment was free bleeding from the arm; purgation (croton oil, one drop in a tablespoonful of castor oil); inhalation of chloroform during the attacks, to be stopped when the desired effect has been gained and replaced by chloral; and, finally, milk diet by the mouth and rectum, given, if necessary, with the œsophageal sound. These statistics of Professor Tarnier may be compared with those given in Professor Byers's report to the Congress, which were supplied to him by Dr. Smyly, the master of the Rotunda Hospital, and which contained cases extending over about the same length of time as Professor Tarnier's. Professor Tarnier had 40 cases of eclampsia with 9 deaths, while at the Rotunda Hospital there were 30 cases with 8 deaths. Professor Tarnier treated the first 18 cases with chloroform, chloral, and milk diet, bleeding being rarely employed, and had 7 deaths, while the first 17 cases at the Rotunda Hospital were treated with chloroform with 6 maternal deaths. The remaining 22 of the Paris cases were treated with free bleeding, purgatives, chloroform, and chloral, and milk given if necessary with a probang, and of these two died, while the remainder of the Rotunda Hospital cases 13 were treated on the morphia (hypodermically) plan, chloroform being used only in instrumental delivery, and there were only 2 deaths. These statistics from two celebrated cliniques in which those in authority altered their line of treatment in dealing with a serious complication — eclampsia — indicate that in each case a decided improvement was gained in the mortality. In the one case the result is attributed to the routine use of morphia in place of chloroform; in the other apparently to the addition to the former methods of free bleeding at the arm, purgatives, combined with the administration of milk given if necessary by œsophageal probang.

This short notice of the Geneva Congress must not be concluded without reference to the great public hospitality. The members were entertained at a reception given by the State Council of the Republic and Canton of Geneva and the City Corporation at the Eynard Palace on Aug. 31st. A delightful

excursion on the Lake of Geneva in a special steamer was aranged for the members of the Congress and their lady friends on Sept. 3rd, with luncheon at Vevey and dinner at the Kursaal of Montreux; the day, which was bright and cloudless, afforded those present opportunities of becoming acquainted with one another and of seeing the magnificent scenery of the most beautiful lake in Switzerland; Dr. Bourcart had charge of the party, and on this as well as on all other occasions during the Congress his tact, courtesy, and *bonhomie* were constantly apparent to everyone. The members were also entertained at luncheon on Sept. 4th by the Hydropathic Society of Champel. The last social function of the Congress was a subscription dinner held on Sept. 5th in the Foyer of the Geneva Theatre, the President (Professor A. Reverdin) being in the chair. Dr. Cordes (whose kindly face was well known to many members from Great Britain from his occasional presence at our medical meetings) is to be warmly congratulated on his incessant efforts to make the Congress in every respect, socially as well as scientifically, a thorough success.

Medical News.

UNIVERSITY OF GLASGOW.—The following candidates have passed the First Professional Examination (new regulations) for the degrees of Bachelor of Medicine (M.B.) and Bachelor of Surgery (Ch.B.) in the subject or subjects indicated after their respective names (B., Botany; Z., Zoology; P., Physics; C., Chemistry):—

Matthew Aikman, M.A. (B., Z.), John Anderson (B.), William Armitage (Z., P.), George Arthur (B., Z., P., C.), Gavin Barbour (B., C.), Thomas Thompson Bathgate (P.), Andrew Baxter (Z., C.), Alexander Binning (B., C.), Alexander Birch (B., Z., P., C.), Harry Egerton Brown (B., P.), William Herbert Brown B., C.), John Douglas Brownlie (B.), George Frederick Buchan (B., Z.), Patrick Thomas Cairns (B., Z.), John Miller Hopkins Caldwell (P.), Edward Provan Cathcart (C.), John Thomson Clark (B., C.), Robert Clark (B., C.), Charles Campell Cuthbert (Z., C.), James Davidson, M.A. (C.), Gregor Hugh Grant-Davie (P., C.), Frank Lindsay Dickson (C.), David Curr Douglas (P., C.), George Horn Downie (Z., P.), George Balfour Eadie (B., P.), Leonard Findlay (B., Z., P., C.), Comyn MacGregor Finlay (C.), John Forrest (B., C.), Thomas Forsyth (B., P.), Alexander Fraser, M.A. (B., Z.), Matthew William Fraser (B., C.), Eric Dalrymple Gairdner (B., Z.), James Gemmell (Z.), Edward Gillespie (B., Z., P.), William Girvan (P.), Charles Aikman Gourlay (B., C.), James Dickson Gourlay (B., Z., P., C.), Charles Herbert Gunson (B., Z., P.), John Andrew Hagerty (Z., P.), Jas. Macpherson Henry (B., C.), Charles Milburn Hope (Z., C.), Thomas Hamilton Jack (B., Z., P., C.), James Thompson Kelly (P.), John Kennedy (Z., P.), Robert Dallas Kennedy (Z.), William Bryce Kerr (B., Z., P.), William Henry Kirk (Z., C.), James Dickson Laidlaw (Z., C.), John Francis Lambie (C.), Alexander Leitch (B., Z., P., C.), James Dunlop Lickley (B., C.), John Lockhart (Z., P.), Alexander Logan (B., P.), David Dale Logan (P.), David Longwill (Z., C.), Andrew Mair (B., C.), Robert M'Nab Marshall (B.), William Maxwell (P.), William Archibald Mills (P., C.), Ebenezer Mitchell, M.A. (B.), John Morison (B., Z.), Alexander Munro (B., C.), Alexander MacCulloch (Z.), Walter James M'Feat (P., C.), George Steventon M'Kinnon (B.), James Mackinnon (Z., C.), George Todd Maclean, M.A. (C.), John Maclean (Z., P.), Burgess M'Phee (C.), Duncan Mackenzie MacRae, M.A. (C.), David Stewart Paterson (B., P.), Robert Paterson (B., Z., P., C.), James Nimmo Prentice (B., Z.), Thomas Hood Rankin (B., Z.), John Duncan Richmond (B., C.), Edward Henry Ross (B., Z.) James Crawford Ross (B., C.), Malcolm Scott (B., Z.), David Shannon (B., C.), Edgar William Sharp (B., C.), John Steele Smith, (C.), David Spence (B.), James Douglas Brownlee Stewart (Z., P.), John Barbour Stewart (B., P.), James Alexander Sutherland (C.), Robert Rennie Swan (B.), Robert Bryers Thom (Z., C.), James Cameron Turnbull (B., C.), Albert Ernest Wainwright (B., C.), William Dinning Walker, (P.), Robert Wallace (B., P.), Peter Millar Waugh (B., Z.), George White (B., C.), George Henry Wildish (C.), David Watson Wilson (B., Z., Thomas Watson Wilson (B., Z.), William Webster Watt Wilson (B., Z.), William Robertson Wylie (B.), and John Young, Glasgow (Z., P.). Women—Martha Adams (B., Z.), Janet Snodgrass Britten (B., Z.), Gertrude Jane Campbell (P., C.), Lizzie Thomson Fraser (B., Z.), Lila Stephenson Greig (B., Z.), Mary Forbes Liston (B., Z.) Jean Marion Farie Marshall (B., Z.), Janet Thomson Miller (B., Z.), Mary Emma Potter (B., Z.), Sara Maude Robertson (B.), Agnes Brymner Sinclair (B., Z., P.), Christian Cleland Wood Smith (B., Z., P., C.), Elizabeth Helen Smith (P., C.), Mabel Talbot (B., Z.), and Gertrude Florence Fleetwood Taylor (C.).

The following have passed the Second Professional Examination (old regulations) for the degrees of Bachelor of Medicine (M.B.) and Mastery in Surgery (C.M.):—

Stewart Dunbar, Thomas Small Goodwin, William Kilpatrick Hutton, M.A., George Moreland, and James M'Craig.

The following have passed the Second Professional Examination (new regulations) for degrees of Bachelor of Medicine (M.B.) and Bachelor of Surger (Ch.B.) in the subject or subjects indicated after their respective names (A., Anatomy; P., Physiology; M., Materia Medica and Therapeutics):—

John Aitken (M.), George Alexander (M.), Arthur James Ballantyne (M.), Robert Fisher Ballantyne (A., P.), Andrew Aitken Barclay (M.), James Barrowman (M.), James Napier Baxter (A., P.), William Bennett (M.), James Symond Beveridge (M.), John Brunton (M.), John James Buchan (A., P.), Robert Carswell, M.A. (M.), Alexander Henderson Cassells (P., M.), Andrew Clark (M.), John Cullen (A., P.), John Ronald Currie, M.A. (A., P.), John Lithgow Davie (P., M.), Robert Douglas, M.A. (M.), Kenneth M'Kenzie Duncan (A., P., M.), Binnie Dunlop (A.), James Fulton Findlay (A., P., M.), Robert Fullarton, M.A. (A., P., M.), Alexander Garrow (M.), James Garden Green (M.), Harold Smith Heap (M.), John Henderson (M.), Ernest Frederick Lionel de Jersey (A.), Edward William Reese Jones (M.), Archibald Jubb (A., P., M.), William Wallace Keir (M.), Andrew Stewart Lang (A., P.), John Wilson Leitch M.A. (A., P., M.); Alexander Matheson (M.), James Blakeley Miller (M.), Ernest Wardlaw Milne (A., P.), James Alexander Mitchell (M.), Percival Ambler Mitchell (M.), Dugald M'Kinlay (M.), Alfred Duncan Macnair (A., P., M.), Roderick Reid Macnicol, M.A. (M.), James M'Whir (A., P.), William Gardner Neill (A., P.), Robert Niven (M.), Percival Leslie Pearce (M.), Joseph Wilkie Scott (M.), John Shaw, M.A. (M.), John Laird Simpson (M.), John Macfarlane Sloan (M.), James Johnston Smith (A.), William Hart Steel, B.A. (A., P., M.), Francis Stevenson (A., M.), Frederick Ernest Stokes (M.), Peter Donald Strachan, M.A. (A., P., M.), Thomas Morton Strang (M.), Andrew Taylor, (A., P.), Alexander Dey Thompson (A., P., M.), Henry Nisbet Turner (A., P.), Robert Andrew Hannan Watson (A., P., M.), William Webster (A., P.), and James Patterson Wilson (M.) Women—Auguste Boyes (P.), Mary Gardner (M.), Jane Grant (A., P.), Mary Longmire (M.), Jane Lorimer (M.), Annie Louise M'Ilroy (A., P., M.), Margaret Wallace Howie M'Neil (M.), Margaret Elizabeth M'Neill (M.), Jean Effie Prowse (P.), Marion Jamieson Ross (M.), and Sara Whiteford (A., M.).

The following have passed the Third Professional Examination (new regulations) for the degrees of Bachelor of Medicine (M.B.) and Bachelor of Surgery (Ch.B.) in the subjects indicated after their respective names (P., Pathology; M., Medical Jurisprudence and Public Health):—

Alexander Smith Allan (M.), James Alston (P., M.), Theodore Belchambers Broadway (P., M.), William Cochran Burns (P., M.), David Louis Cairns (P., M.), Joseph Adam Clarke (P., M.), George Coats (P., M.), George William Coats (M.), John Crow (P., M.), James Finlayson Fleming (M.), Thomas Bonnar Garvie (P., M.), Thomas Hunter, M.A., B.Sc. (P., M.), Alexander Millar Lindsay (P., M.), William Mitchell Lindsay (M.), John Watson Little (P., M.), John MacDonald (P., M.), Laurence Abel Mackenzie (P.), James M'Queen, M.A. (P., M.), James Service Ormond (P., M.), John Reid, Glasgow (P., M.), Robert Scott (P., M.), Alexander Bankier Sloan (P., M.), John M'Callum Stewart (P., M.), James Strang (P., M.), Donald Sage Sutherland (P., M.), William James Alexander Walker (P.), William Watson (P., M.), Ernest Watt (P., M.), Edward Roberts Weir (M.), John Wotherspoon (P., M.), and David John Young (P., M.). Women—Lucy Buckley, B.Sc. (P., M.), and Jessie Hawkesworth Smith (P., M.).

The following have passed the Third Professional Examination (old regulations) for the degrees of Bachelor of Medicine (M.B.) and Master in Surgery (C.M.):—

(A.) Including Pathology.—Ernest Alexander Campbell, Walter Colquhoun, M.A., John Crawford, William Duncan, James William Johnstone, and James Rankin, B.Sc. Women—Martha Jane Gilmore Cox.

(B.) Not including Pathology.—James Andrew, James Boyle, William Fullerton M'Ewen, Charles David Picken, Robert Rillie, John James Robertson, Joseph Sillars, and Ernest Thomas Keay Walker.

ROYAL COLLEGE OF PHYSICIANS OF IRELAND.—The following gentlemen have passed the examination for the diploma in State Medicine of this College:—

Honours Division.—John Tubb Thomas, L.R.C.S.Ed., &c.

Pass Division.—William Henry Hallam, L.R.C.P.Ed., M.R.C.S. Eng.; Daniel Lewis Thomas, M.R.C.S. Eng., L.R.C.P. Lond.; and Edward George Younger, M.R.C.S. Eng., M.R.C.P. Lond.

SOCIETY OF APOTHECARIES OF LONDON.—The following candidates have passed in the under-mentioned subjects of the Primary Examination:—

PART I.

Chemistry.—T. J. M. Clapperton, Edinburgh; T. A. E. Fawcett, Leeds; and J. Vipan, Glasgow.

Materia Medica and Pharmacy.—A. E. Brown, Royal Free Hospital; K. Datta, Paris and Edinburgh; G. J. D. Davies, Leeds; and K. E. Gregg, K. Heanley, I. Robson, and S. H. Smith, Royal Free Hospital.

PART II.

Anatomy and Physiology.—A. M. Davis, Birmingham; S. J. H. M. H. Field, Royal Free Hospital; R. T. Forster, Leeds; J. Valerie, St. Bartholomew's Hospital; and A. F. Weston and C. H. F. Williams, St. George's Hospital.

Anatomy.—A. L. Bartram, Cambridge; R. Holt, Royal College of Surgeons in Ireland; F. J. Keats, Middlesex Hospital; C. G. Meade, St. Bartholomew's Hospital: A. W. Powell, Guy's Hospital; H. F. Stilwell, St. Bartholomew's Hospital; and R. A. Taylor, London.

Physiology.—L. Bradstock, Birmingham; S. K. Cama, Bombay; F. Carter, Edinburgh; E. A. Charlesworth, Middlesex Hospital; C. A. W. Egan, Dublin and St. Thomas's Hospital; J. Ellul and A. D. Evans, Edinburgh; S. K. K. Haslam, Royal Free Hospital; J. Jones, Edinburgh; and H. J. Pickering, St. Bartholomew's Hospital.

PRIZEMEN AND MEDALISTS AT THE METROPOLITAN MEDICAL SCHOOLS:—

St. Bartholomew's Hospital and College.—Entrance Scholarships:—1. Senior Science Scholarship in Biology and Physiology (£75), awarded to C. J. Thomas. 2. Senior Science Scholarship in Chemistry and Physics (£75), awarded to H. F. Parker, B.A., Emanuel College, Cambridge, and E. H. Scholefield, B.A., New College, Oxford (equal). 3. Junior Science Scholarship in Biology, Chemistry, and Physics (£150), awarded to R. C. Elmslie. 4. Preliminary Scientific Exhibition

(£50) in Biology, Chemistry, and Physics, awarded to R. A. S. Sunderland. 5. Jeaffreson Exhibition (£20), awarded to S. G. Mostyn.

Westminster Hospital School of Medicine.—Natural Science: £60, to W. Payne; £40, to E. R. Carling. The Governors' Scholarship (£40), to J. E. Skey; Scholarship in Arts (£40), to F. D. Martyn.

St. Mary's Hospital Medical School.—Entrance Scholarships. Natural Science, September, 1896: £105, C. C. C. Shaw; £52 10s., W. J. Morrish; £52 10s., J. Gay French. University Scholarship: £52 10s., A. G. Wilson, B.A.

King's College, London.—Sambrooke Exhibitions of £60 and £40 respectively to Arthur Edmunds and W. W. Campbell. Warneford Scholarships of £25 each for two years to J. A. Drake and C. J. Galbraith.

DR. MARRIOTT of Reading, on the nomination of the Lord Lieutenant of Berkshire, has been placed on the Commission of the Peace for the county.

THE collection of papers and monographs on Graves's disease made by Mr. Arthur Maude has been placed by him in the library of the Royal College of Surgeons of England. It comprises nearly 100 reprints and papers in English, French, and German.

THE DENTAL HOSPITAL OF LONDON.—Under the will of Miss Georgiana E. Ormerod the Dental Hospital of London, Leicester-square, which is about to be rebuilt on a larger site, the present building being in every way inadequate, will benefit by a legacy of £200.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

ADAMS, PERCY T., M.R.C.S., L.S.A., has been appointed Assistant-Surgeon to the Kent County Ophthalmic Hospital.

AIKEN, A., L.R.C.P., L.R.C.S. Irel., has been appointed Medical Officer for the Pettigo Dispensary District of the Donegal Union, and Medical Officer for the Clonelly Dispensary District of the Irvinestown Union.

ASHBY, A., M.B. Lond., F.R.C.S., has been re-appointed Medical Officer of Health by the Wokingham District Council.

FARRANT, MARK, jun., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of Health to the St. Thomas Rural District Council, Devon.

FORT, THOS., L.R.C.P. Edin., M.R.C.S., has been re-appointed Surgeon to the Oldham Borough Police.

GIRDLESTONE, H. E., M.R.C.S., L.R.C.P., has been appointed House Surgeon to the Royal Eye Hospital, Southwark.

GRUGGEN, W., L.K.Q.C.P. Irel., L.F.P.S. Glasg., D.P.H. Camb., has been appointed, *pro tem*, Medical Officer by the Ware Urban District Council.

HALL, J., M.D. St. And., L.R.C.P., L.R.C.S. Edin., has been appointed Certifying Factory Surgeon for Royton, vice T. S. Lacey.

HAYLETT, P. H., M.B. Lond., L.R.C.P., has been appointed House Surgeon to the Cape Town Hospital, South Africa.

HOOD, NOEL L., B.A., M.B., B.Ch. Cantab., has been appointed House Physician of the Brompton Hospital for Consumption and Diseases of the Chest.

HOUNSELL, F. C. W., M.R.C.S., has been appointed Medical Officer for the Bugbrooke Sanitary District of the Northampton Union.

HUMPHRY, LAURENCE, M.D. Camb., M.R.C.P. Lond., M.R.C.S., has been re-appointed Assistant Physician of Addenbrooke's Hospital, Cambridge.

IZARD, H. E., M.R.C.S., L.R.C.P., has been appointed Junior Resident Medical Officer to the Manchester Children's Hospital, Pendlebury, vice C. H. Melland.

JONES, HUGH R., M.D., has been appointed Assistant Surgeon to the Main Bridewell, Liverpool.

JONES, W. D., L.R.C.P. Edin., M.R.C.S., has been re-appointed Medical Officer by the Ruthin Town Council.

LAVERS, NORMAN, L.R.C.P., M.R.C.S., has been appointed Junior Medical Officer at the Camberwell House Asylum.

MACALISTER, D., B.Sc. Lond., M.D. Camb., F.R.C.P. Lond., has been re-appointed a Physician of Addenbrooke's Hospital, Cambridge.

MCNAUGHT, JAMES, M.D. Edin., M.R.C.S., has been re-appointed Medical Officer of Health for the Borough of Rawtenstall.

PARKER, GEO. R., L.R.C.P. Lond., M.R.C.S., has been re-appointed Medical Officer of Health for the Lancaster Urban Sanitary District.

REVELL, HUGH STANLEY, M.R.C.S., L.R.C.P. Lond., has been appointed District Medical Officer for Wandsworth by the Wandsworth and Clapham Union.

SHACKLETON, W. W., M.D. B.Ch. Dubl., has been appointed Medical Officer for the Aldenham and Bushey Sanitary District of the Watford Union, vice J. A. Clarke.

SISSONS, W. H., M.R.C.S., has been re-appointed Medical Officer of Health by the Barton-upon-Humber Urban District Council.

WELLINGTON, R. H., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of Health by the Wisbech Port Sanitary Authority.

WHITE, R. P., M.D. Edin., M.R.C.S., has been appointed Certifying Surgeon under the Factories and Workshops Act, vice James White.

WHITE, W. R., M.D. Aberd., M.R.C.S., has been appointed Medical Officer for the Benenden Sanitary District of the Cranbrook Union.

WILLS, CHAS., M.R.C.S., has been re-appointed Medical Officer of Health by the Kiveton Park (Yorks) Rural District Council.

WRIGHT, W. H., L.R.C.P. Irel., M.R.C.S., has been re-appointed Medical Officer of Health by the Alvaston and Boulton District Council.

YOUNG, MEREDITH, M.B., C.M. Edin., has been re-appointed Medical Officer of Health to the Borough of Brighouse (Yorks), and to the Halifax Rural District Council.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

BIRMINGHAM AND MIDLAND FREE HOSPITAL FOR SICK CHILDREN.—Resident Surgical Officer. Salary £50, with board, washing, and attendance in the institution.

BRADFORD INFIRMARY.—Dispensary Surgeon. Salary £100 per annum, with board and residence.

BURY DISPENSARY HOSPITAL.—Senior House Surgeon. Salary £100 per annum, with board, residence, and attendance.

GESTO HOSPITAL, Island of Skye.—Medical Officer. Salary £200 per annum, with furnished house, fire, and light. Applications to Mr. Joshua MacLennan, Solicitor, Portree, Secretary to the Hospital Trust.

HOSPITAL FOR DISEASES OF THE THROAT, Golden-square, London, W.—Resident Medical Officer.—Salary £50 per annum, with board, washing, &c.

HOSPITAL FOR SICK CHILDREN, Great Ormond-street, Bloomsbury.—House Surgeon, unmarried, for six months. Salary £20, with board and residence in the hospital. Also House Physician, for six months. Salary £20, with board and residence in the hospital.

METROPOLITAN HOSPITAL, Kingsland-road, N.E.—Assistant Physician.

NEW HOSPITAL FOR WOMEN, 144, Euston-road, N.W.—A Clinical Assistant (qualified woman) for the Out-patient Department.

NORTH-WEST LONDON HOSPITAL, Kentish Town-road.—Resident Medical Officer and Assistant Resident Medical Officer for six months. Salary at the rate of £50 per annum attaches to the senior post.

NOTTINGHAM GENERAL DISPENSARY, Broad-street, Nottingham.—Resident Surgeon for a Branch Dispensary. Salary £200 per annum, with rooms and attendance.

POPLAR UNION.—Medical Officer for the Old Ford District of the Union. Salary £130 per annum, the Guardians supplying drugs. Applications to the Clerk, 45, Upper North-street, Poplar, E.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL, Marylebone-road, N.W.—Assistant Resident Medical Officer for four months. Salary at the rate of £50 per annum, with board and residence.

ROYAL PORTSMOUTH HOSPITAL.—Assistant House Surgeon for six months. Board and residence and an honorarium of £15 15*s*.

ROTHERHAM HOSPITAL AND DISPENSARY.—Assistant House Surgeon for six months. Board, lodging, and washing provided.

SEAMEN'S HOSPITAL SOCIETY, Greenwich.—House Surgeon at the *Dreadnought* Hospital, Greenwich. Salary £50 per annum, with board and residence.

SOUTH DEVON AND EAST CORNWALL HOSPITAL, Plymouth.—Assistant House Surgeon for six months. Board and residence and an honorarium of £10.

SUSSEX COUNTY HOSPITAL, Brighton.—Assistant House Surgeon, unmarried. Salary not exceeding £30 per annum, with board, washing, and residence in the hospital.

TAUNTON AND SOMERSET HOSPITAL, Taunton.—Assistant House Surgeon for six months. Board, washing, and lodging in the institution provided.

TUNBRIDGE WELLS GENERAL HOSPITAL.—Resident House Surgeon, unmarried. Salary £100 per annum, with board, furnished apartments in the hospital, gas, firing, and attendance.

WOLVERHAMPTON EYE INFIRMARY.—House Surgeon, for twelve months. Salary £60 per annum, with rooms, board, and washing.

Births, Marriages, and Deaths.

BIRTHS.

MUDD.—On Oct. 7th, at Ewell, Surrey, the wife of Barrington William Mudd, M.B., of a daughter.

ROBINSON.—On Oct. 7th, at Woodbank, Oakamoor, North Staffordshire, the wife of Bernard Robinson, L.R.C.P. Lond., M.R.C.S. Eng., of a daughter.

WARRY.—On Sept. 27th, at 39, Filey-avenue, Clapton-common, N., the wife of J. King Warry, M.D. Lond., of a daughter.

MARRIAGES.

BEACHCROFT—SWINHOE.—On Oct. 7th, at St. Mark's Church, New Swindon, Francis Seward Beachcroft, M.R.C.S., L.R.C.P. Lond., of Petworth, Sussex, eldest son of Francis Porten Beachcroft, of Shelton, Sydenham-hill, to Amy Letitia, second daughter of George Money Swinhoe, of Park House, New Swindon.

CLARK—HARVEY.—At St. Andrew's Parish Church, Moretonhampstead, on October 7th, John Stallard Foot Clark, M.R.C.S. Eng., L.R.C.P. Edin., to Emily, widow of the late Wm. Phillips Harvey, Solicitor. No cards. At home 28th, 29th and 30th.

JOHNSON—FOXWELL.—On Oct. 10th, at St. Lawrence Church, Northfield, Worcestershire, by the Rev. Canon Hodgkinson, M.A., Harold Jossé, M.B. Lond., D.P.H. Camb., of 37A, Finsbury-square, London, eldest son of Geo. N. Johnson, of Aberdeen-park, Highbury, to Emily Jane, eldest daughter of the late Thomas Somerton Foxwell, of Weston-super-Mare, Somerset.

DEATHS.

HAWKINS.—On Oct. 2nd, at Colaba House, Merton-road, Southsea, the wife of Alex. F. Hawkins, F.R.C.S.E. Edin., and daughter of the late Captain Kelso, of Horkesley Park, Essex.

MINTO.—On Oct. 10th, at Brighton, James Clephan Minto, M.D., aged 91 years.

MORRIS.—On Oct. 10th (suddenly), at Bank House, Rickmansworth (the residence of his son-in-law), Edwin Morris, M.D., F.R.C.S., late of Spalding, Lincolnshire, aged 81.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Oct. 15th, 1896.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb.	Solar Radia in Vacuo	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
Oct. 9	29·82	S.W.	52	50	103	65	50	...	Fine
,, 10	29·71	S.W.	56	55	101	62	51	...	Cloudy
,, 11	29·72	N.W.	44	42	57	46	43	...	Cloudy
,, 12	29·77	N.	45	44	57	47	39	0·76	Overcast
,, 13	30·13	N.E.	44	41	82	51	39	0·53	Fine
,, 14	30·24	N.E.	47	46	74	57	42	0·15	Cloudy
,, 15	30·10	S.E.	53	52	67	57	46	...	Overcast

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY (19th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (2 P.M., Ophthalmic 1.15 P.M.), St. Mary's (2.30 P.M.), Middlesex (1.30 P.M.), St. Mark's (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.).

TUESDAY (20th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (2 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.).

WEDNESDAY (21st).—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.).

THURSDAY (22nd).—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.)

FRIDAY (23rd).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), St. Mary's (2 P.M., Ophthalmic 10 A.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.).

SATURDAY (24th).—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), St. Mary's (10 P.M.), Cancer (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

WEDNESDAY (21st).—ROYAL MICROSCOPICAL SOCIETY (20, Hanover-sq., W.).—8 P.M. Mr. J. Butterworth: Photo-micrography Camera, designed chiefly to facilitate the Study of Opaque Objects.—Mr. T. Comber: On the Occurrence of Endocysts in the Genus Thalassiosera.—Mr. E. M. Nelson: On the Measurement of the Apertures of Objects.

FRIDAY (23rd).—CLINICAL SOCIETY OF LONDON.—8.30 P.M. Mr. H. Clutton: Resection of a Dilated Sigmoid Colon.—Mr. H. B. Robinson: Suppurative Pericarditis, Resection of the Sixth Rib, Drainage through Left Pleura, Recovery.—Mr. F. C. Wallis: A Case of Nephrectomy for Trauma.—Dr. Le Cronier Lancaster: A Case of Gastric Varix Rupture, Fatal Hæmatemesis.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

MONDAY (19th).—LONDON POST-GRADUATE COURSE.—Roy. Lond. Ophthalmic Hospital, Moorfields, 1 P.M., Mr. W. Lang: Cataract.—London Throat Hospital, Gt. Portland-st., W., 8 P.M., Dr. Woakes: Vertigo.

TUESDAY (20th).—LONDON POST-GRADUATE COURSE.—Bethlem Hospital, 2 P.M., Dr. Craig: Stupor; Katatonia; Dementia and Senile Insanity.—Hospital for Skin Diseases, Blackfriars, 4.30 P.M., Dr. P. Abraham: Syphilitic Eruptions.

THE HOSPITAL FOR SICK CHILDREN, (Gt. Ormond-st., W.C.)—2.30 P.M. Dr. Lees: Heart Disease in Children.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Bloomsbury).—3.30 P.M. Dr. Beevor: Cases Illustrating Cerebral Localisation.

WEDNESDAY (21st).—LONDON POST-GRADUATE COURSE.—Roy. Lond. Ophthalmic Hospital, Moorfields, 8 P.M., Mr. A. Q. Silcock: Diseases of Retina, with Cases.

HOSPITAL FOR CONSUMPTION, &c. (Brompton).—4 P.M. Dr. Sidney Martin: Mediastinal Tumour.

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.).—5 P.M. Mr. S. Paget: Surgical Cases.

THURSDAY (22nd).—LONDON POST-GRADUATE COURSE.—Brit. Inst. of Preventive Medicine, Gt. Russell-st., W.C., 3.30 P.M., Dr. Allan Macfadyen and Mr. A. G. Foulerton: Qualitative Tests for Albumins.—Central London Sick Asylum, Cleveland-st., W., 5.30 P.M., Mr. Jonathan Hutchinson: Clinical Lecture.

THE HOSPITAL FOR SICK CHILDREN, (Gt. Ormond-st., W.C.)—4 P.M. Dr. Garrod: Hemiplegia in Children.

FRIDAY (23rd).—LONDON POST-GRADUATE COURSE.—King's College, 3 to 5 P.M., Prof. Crookshank: Anthrax and Malignant Œdema.

THE HOSPITAL FOR SICK CHILDREN, (Gt. Ormond-st., W.C.)—10.30 A.M. Dr. Penrose: Diseases of the Abdominal Organs.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Bloomsbury).—3.30 P.M. Dr. Taylor: Case-taking.

Notes, Short Comments, and Answers to Correspondents.

EDITORIAL NOTICE.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side of the paper only.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager."*

We cannot undertake to return MSS. not used.

MANAGER'S NOTICES.

THE INDEX TO THE LANCET.

The Index for the first half-yearly volume for 1896 was given in the issue of June 27th. The practice of supplying loose copies has been discontinued, the Index having been placed in the centre of the journal, whence it can easily be detached, and placed either at the beginning or at the end of the volume.

VOLUMES AND CASES.

VOLUMES for the first half of the year 1896 are now ready. Bound in cloth, gilt lettered, price 18*s.*

Cases for binding the half-year's numbers are also ready. Cloth, gilt lettered, price 2*s.*, or post free 2*s.* 3*d.*

To be obtained on application to the Manager, accompanied by remittance.

GENERAL PRACTITIONER SPECIALISTS.

To the Editors of THE LANCET.

SIRS,—A gentleman practising here has "Physician and Surgeon" on a brass-plate on the side of his house, and he has another brass-plate on his door with "Ophthalmic Surgeon." Besides these he has two other brass-plates with "Physician and Surgeon" in other parts of the town. My objection is against "Ophthalmic Surgeon" being put on a general practitioner's door, because a great number of one's private patients naturally go to this "eye doctor," on the supposition that he is the only practitioner who knows "all about eyes," when, possibly, the majority of the other practising medical men are capable, and anxious to treat ordinary ophthalmic cases, or if not they would prefer recommending serious cases to an ophthalmic specialist, who is not a general practitioner. I should like to know if the objection I have raised is a reasonable one, as I feel very strongly that a man who puts "Ophthalmic Surgeon" on his door-plate should not practice as a general practitioner.

I am, Sirs, yours faithfully,

Oct. 15th, 1896. OPHTHALMOSCOPE.

*** Our correspondent's point seems to us a good one. The claim to special knowledge indicated by such a plate as "Ophthalmic Surgeon" on a general practitioners door might seduce patients from other general practitioners with equal knowledge of ophthalmology.—ED. L.

THE QUACK FERDINAND AGAIN.

THE man Ferdinand, or Woodland, again attended at an inquest held by Mr. Braxton Hicks at Battersea and was ordered to produce his diploma. He professed himself unable to do so. The inquest was again adjourned, so we refrain from further comment.

THE CONSULTING-ROOM SNEAK AGAIN.

To the Editors of THE LANCET.

SIRS,—There is a short, fresh-coloured young man, dressed in a covert coat, who has been calling around this neighbourhood upon medical and dental men under the pretext of being an agent for different things, and when the principal is out he passes as a friend of his and asks to be allowed to write a letter; needless to say he makes the best use of his opportunities to appropriate whatever may be handy.

I trust you will kindly insert this warning in your valuable paper, as already I have heard of five or six of his victims, and he will necessarily change the field of his operations. I am, Sirs, yours truly,

Victoria-street, S.W., Oct. 11th, 1896. A. JNO. CARDELL.

*** In this connexion we read this week in one of the daily papers of the commendable astuteness of a housemaid. She had been told of the manners of these people, and suspecting one of her master's visitors she sent for the police, who recognised in the spurious patient a man who was "wanted."—ED. L.

THE SALE OF DIPLOMAS.

To the Editors of THE LANCET.

SIRS,—In THE LANCET of Oct. 3rd, p. 954, reference is made to an inquest at which it transpired that Dr. A. Bell had called in "Mr. Holmes, licentiate in midwifery of the Rotunda Hospital, Dublin," who was not a registered practitioner. In the same journal in the March 21st, 1896, issue, page 790, is the record of another inquest at which it transpired that Mr. G. de G. Griffith, of the Zenana Medical College, London, had been asked to attend a child, but that instead of going he had sent a midwife who was the matron of this college. I beg to use these two cases to point to our efforts, lately made, to put a stop to the supplying of persons with diplomas or documents, such donors not being authorised by the Medical Acts to do so. In November, 1895, I memorialised the General Medical Council and called attention to the action of practitioners connected with the Rotunda and Coombe Hospitals, Dublin. I pointed out that these practitioners were granting documents to persons who were not, and who might not ever become, medical practitioners. The diploma granted by the Rotunda Hospital practitioners is in Latin (and therefore all the more likely to be used with fraudulent intent) and is as follows:—"Nos præfectus et assessores domestici nosocomii Dublinensis in curam Parturientium constituti Hisce Literis testamur Ingenuum Probumque Juvenem A. B. non solum præiectionibus nostris obstetricis summo opere animum advertisse quamdiu nobiscum moratus est sed insuper ipsum Puerperis felices manus per sex menses adtulisse. Quibus permoti prædictum pro habili et obstetrice perito comprobamus. In cujus Rei testimonium chirographa signatorum et nosocomii sigillum opposuimus." The following is a translation: "We, the master and resident assistants of the Dublin Lying-in Hospital, by these letters hereby certify that A—— B—— is of good character and ability; that he has regularly attended lectures on midwifery, and has personally attended ..... cases of labour for a period of six months. We therefore are able to certify to his practical skill and knowledge as an obstetrician, and in testimony thereof affix our hand and seal." The diploma or instrument granted by practitioners connected with the Coombe Lying-in Hospital is also in Latin and printed on parchment, and so resembles closely the documents granted by the medical examining bodies under the Medical Acts. Its translation is as follows: "We hereby certify that A—— B—— for a period of six months regularly attended a course of lectures and practical instruction in obstetrics at this hospital. We further certify that he submitted himself to examination in this subject, and also on the treatment of diseases of women and children, and gave evidence of satisfactory knowledge."

Now, Sirs, can we not induce the practitioners who grant the above to cease doing so? Cannot the Dublin Branch of the British Medical Association take this matter up? I would suggest that it is worth while for practitioners to subscribe to a fund to be used to buy the rights, if any, of these practitioners, if they do not care for the true dignity of our profession and cease granting these misleading documents. The sixteen medical examining bodies are more than sufficient to grant all the necessary diplomas without calling in the aid of societies and hospitals. I would publicly appeal to my fellow countrymen not to soil the good name of our profession; not to set a downgrade example to others—such as the General Council of Safe Medicine, Limited—but to cast this trafficking in diplomas from them. Example such as theirs has been followed by the above referred to Zenana Medical College, which grants a diploma or instrument in which it is stated "We certify that we have examined ..... in the following subjects—medicine, disorders of tropical climates, minor and practical surgery, including diseases of the eye, midwifery, and diseases of women and children, and we find that she possesses such a knowledge of them as will qualify her to render professional aid in ordinary cases of disease."

I have called the attention of the General Medical Council to these and to other diplomas, and the Council has made an important rule upon the subject. If the Medical Defence Unions would only take this broadcast issuing of diplomas by unauthorised practitioners up, they would do more to check quackery than would many prosecutions of prescribing by chemists, &c. There is as much, if not more, quackery inside our profession than there is outside it, and the quackery which exists outside of it has been largely manufactured by us practitioners. I know of one case where a practitioner "covers" a midwife whom he sends to all his cheap confinement cases, never going near such patients. I am told of two retired policemen who have been lectured and given ambulance diplomas, on which are printed the words that the holder "is qualified to render first aid to the injured," no matter evidently whether or no the services of a practitioner are at hand, and who have lately become medical herbalists. I am told of practitioners who employ young men to do their dispensing with the view of obtaining the three years' certificate for the chemists' certificate, but who are employed as assistants and who do not qualify for chemists, but who swell the ranks of the unqualified. Do we not also know of the degradingly low standard of the Entrance Examination of those about to become medical students, so that in the downgrade competition one medical school may have more students than another? The evil that these practitioners do lives after them. All these discouraging facts are well-known to us. Will practitioners go on encouraging them by a policy of indifference and *laissez-faire*; or will each one shake himself free of this accursed apathy, the desire to please some seniors, and a fear of injuring his prospective hope of obtaining some appointment, and so help to render our calling something better and something purer than it now is. Depend upon this, the public are now closely scanning our action; we are not occupying the position in the esteem of the public which we should, and when the time comes to ask for legislation against quackery in all its many forms, we shall be called upon first to prove, up to the hilt, that we have first set our own house in order and that we are not playing the Pharasaic part of the mote and the beam.

I am, Sirs, yours faithfully,

Liverpool, Oct. 12th, 1896. ROBERT R. RENTOUL.

*** If Dr. Rentoul had read our annotation carefully he would have seen that Dr. Alan Bell did not call in Mr. Holmes, whose attendance was due to the wishes of the patient and her friends.—ED. L.

DIRECT REPRESENTATION ON THE GENERAL MEDICAL COUNCIL.

A CORRESPONDENT (N. R.) writes as follows upon this subject:—"If a strong committee was formed"—we presume he means of the whole profession—"who would go to the expense of calling a meeting and organising a canvass by circular, there are many first-class men who have position and leisure who would feel it an honour to be asked to stand as candidates for the direct representatives of the profession." This is doubtless true, though not very clearly expressed, but who is to select the committee which will afterwards select the candidates? "N. R." goes on to say: "Ten years ago a meeting of the profession was called at Birmingham when Mr. Wheelhouse and Sir W. Foster were nominated, Mr. Glover, I believe, being nominated by the London practitioners. Why not have a similar meeting?"

"LOCAL HOT-AIR TREATMENT."

To the Editors of THE LANCET.

SIRS,—Referring to the report of cases by Dr. W. K. Sibley in THE LANCET of Aug. 29th last, which were treated by the above method, I am glad to be able to confirm from personal experience the curative effect of a course of only four baths for chronic sciatica and lumbago, which had begun to extend to the sound leg. In the severe winter of 1894 I had an attack of acute sciatica which has continued in a chronic form. Having acted as resident physician to three hydropathic establishments I had enjoyed considerable experience in the treatment of such cases, and was enabled to apply the knowledge so acquired to my own case. The relief obtained was but slight and I had difficulty in getting about, the pain at times being very severe. I am glad to be able to record that I derived benefit from the first hot-air bath of the Tallerman-Sheffield process. Having now taken four I am free from pain and able to walk three miles at a stretch. No ill effects or risk of any sort are likely to attend a course of these baths, a slight rise of temperature and increase of pulse being alone indicated. The baths were taken at the institution, 50, Welbeck-street, W., and I am indebted to Mr. Lewis A. Tallerman for much kindness and attention.

I am, Sirs, yours faithfully,

F. FITZHERBERT JAY, M.D. St. And.

Constitutional Club, Oct. 7th, 1896.

To the Editors of THE LANCET.

SIRS,—I can endorse the statement of "Medicus" that the principle of the application of hot air to various parts of the body is not new. I remember my father, some forty years ago, having a metal cylinder constructed which was heated by a spirit lamp; the affected limb was placed in it, but exactly how it was protected I do not recollect. This apparatus he was accustomed to lend to his patients, who generally derived benefit from its use. At that time I had not devoted my attention to medical subjects and have forgotten the exact form of the apparatus; I believe, however, one is still in existence, and I hope to be able to trace it. I, like "Medicus," am much interested in this "local hot-air treatment" by the Tallerman-Sheffield plan, and was anxious to avail myself of its use for my own relief from rheumatoid arthritis, but I find the price asked for hire only (the Tallerman-Sheffield Company do not seem to sell outright) is so exorbitant, and the conditions of hire so exacting, that to any but a wealthy individual the whole thing is prohibitive. Doubtless, if the treatment by this process is as successful as it is represented to be improvements and substitution of an equally effective apparatus will be devised and available on reasonable terms, not only to the profession, but to the sufferers from rheumatoid arthritis generally. I am, Sirs, yours faithfully,

Oct. 13th, 1896. M.D.

PHYSICAL EXAMINATION FOR THE NAVY: THE UNDESCENDED TESTICLE.

To the Editors of THE LANCET.

SIRS,—Could any of your readers kindly inform me on the following points? Firstly, whether a lad aged seven years suffering from an imperfectly descended and badly developed testicle would be admitted into the navy provided that the slight accompanying hernia is cured previously to his physical examination for entry; secondly, if not, whether removal of the testicle would be a bar to his successful admission; or, thirdly, whether in any case it would be advisable to remove the atrophied testicle. The parents of the boy are very anxious for him to enter the service, and I should be grateful for the opinion of someone who has experience of such matters.

I am, Sirs, yours truly,

Argyll-road, W., Oct. 13th, 1896. JOHN LYNES.

C. S. W.—The action of the medical man in question is reprehensible, but it is not illegal, and there is no way of staying it except by a process of moral suasion.

CHINESE EUNUCHS.

IN China the Emperor and certain members of the Royal Family are alone entitled to keep eunuchs. His Majesty maintains at least 3000, but no Prince of the blood or Imperial Princess has a right to more than thirty. Theoretically the palace eunuchs are furnished by governors of provinces, each of whom has to supply eight every five years, receiving in return 250 taels per eunuch. It was found, however, that the number thus obtained was totally insufficient, so a recruiting office was established at Pekin for the direct enrolment of candidates. In the production of Chinese eunuchs four chief factors prevail, viz., greed, predilection, poverty, and laziness. Many parents sell their male children to the mutilators or themselves castrate them in the hope of eventually sharing their earnings. Young men of from twenty-five to thirty years of age, some of them having wives and families, often accept emasculation, being allured by the prospect of emolument. Poor wretches destitute of means and threatened with starvation agree to become eunuchs in order to gain a living. Finally, a certain number of lazy, good-for-nothing vagabonds sacrifice their manhood to secure a life of indolence. The operation is performed in a building situated close to one of the palace gates, but the operator, although his office is a recognised and hereditary one, having been for many years in the same family, receives no regular wages, being entitled to a fee of 6 taels from each individual operated on. In the case of destitute candidates he exacts a lien on their prospective earnings. Dr. Matignon's description of the operation is as follows. The subject, with his abdomen and thighs tightly bandaged, is placed supine on a low bed, one assistant grasping him firmly round the waist, while two more keep his legs widely separated. The operator, as a rule, uses a curved implement resembling a pruning-knife, but occasionally he substitutes for it a long pair of scissors. With his left hand he seizes the parts, squeezing and twisting them to diminish the supply of blood; but before cutting he enquires for the last time whether or not the patient is a consenting party. Adults, of course, answer for themselves, no anæsthetic being used, but in the case of children the parents' word is accepted. The reply being in the affirmative, a single rapid sweep of the hand serves to remove both penis and scrotum, the blade of the instrument passing as close as possible to the pubis. A small piece of wood or of pewter shaped like a nail is then inserted in the urethra; the wound is washed two or three times with pepper and water, and several sheets of paper having been applied to the raw surface the parts are carefully and tightly bandaged. The subsequent treatment is remarkable. Immediately after the bandaging the unfortunate patient is seized by the assistants and made to walk up and down the room at a rapid rate, not being permitted to lie down for three hours. For three days he is not allowed to drink anything, and not only does he suffer the pangs of thirst, but also has to endure the agonies of retention owing to the plug in his urethra. On the fourth day the bandages are removed and the wretched creature is suffered to pass urine if he can. If the urine flows he is looked upon as cured, but should the overstrained bladder refuse to act he is left to die, the virtues of catheterisation being apparently unknown to the Chinese. The amputation leaves a large triangular wound with the apex downwards, which takes on an average about a hundred days to granulate. Notwithstanding the primitive mode of procedure the operation is usually successful, and fatal cases do not amount to more than three or four per cent. The most frequent complication is incontinence of urine, but if this unpleasant symptom continues beyond what is considered a reasonable period the patient is condemned to flagellation, a mode of treatment which is said to yield the most excellent results.

"BROMIDE OF STRONTIUM IN EPILEPSY."

To the Editors of THE LANCET.

SIRS,—I am pleased to see by a letter in THE LANCET of Oct. 10th that Dr. Christy has found the bromide of strontium useful in epilepsy. I do not, however, in my article in any way suggest that the use of this medicine is original on my part; I am quite aware it has been used for years. My object in publishing my cases was to elicit the opinions and experience of others. I am, Sirs, yours faithfully,

ANTONY ROCHE, M.R.C.P.Irel.

Stephen's-green, S., Dublin, Oct. 10th, 1896.

F. C.—Only a solicitor can say with certainty, and that after reading any written agreement that may exist between our correspondent and the court. The length of tenure of the appointment constitutes an argument for generous treatment, but it does not import into an agreement a clause not previously there.

AN EXPLANATION.

To the Editors of THE LANCET.

SIRS,—We are in receipt of a letter of complaint from Dr. George Herschell in reference to a printed extract from an article written by him in THE LANCET of Aug. 15th, 1896. We beg to inform you that the extract from THE LANCET was made use of without his (Dr. Herschell's) knowledge or permission, and our version of the affair is that as the article was printed in such a widely-known paper it was public property and we did not hesitate to make use of such part as was of most use to us, and we are sorry to find we have offended anyone in the matter. We have written a letter of explanation as above to Dr. Herschell, and trust that this will prove satisfactory. We wish it to be distinctly understood that Dr. Herschell has no connection with us whatever, and we regret very much to have given him any cause for offence.

We are, Sirs, yours very respectfully,

THE WHITELY EXERCISER, Ltd.,
LUIS J. PHELAN, Business Manager.

10, Ironmonger-lane, Cheapside, Oct. 7th, 1896.

M. D. Ed.—We are sure that Sir Henry Littlejohn did not mean his words to convey any slighting reference to the University of Edinburgh, whose degrees he holds. It is possible that he was referring to the following fact. Members of the corporations can be removed from the lists of their corporation if they misbehave, but the universities, as a rule, exercise no supervision over their registers; once a graduate always a graduate, even though the *rôle* of knave be added.

PAUPERISM IN PARIS.

THE Assistance Publique Budget in Paris amounts to about £1,500,000 annually, the following being the principal heads of expenditure. Administrative personnel, £80,000; medical and surgical personnel, £40,000; subordinate personnel, £80,000; meat, £160,000; bread, £60,000; liquor, £60,000; fish, vegetables, butter, groceries, &c., £140,000; warming and lighting, £100,000; medicine, £52,000; repairs to buildings, £52,000; washing, £40,000; linen, bedding, clothes, dressing material, and surgical instruments, £92,000; endowments, £80,000; *service des secours*, £420,000; miscellaneous expenses, £144,000. Total, in round numbers, £1,600,000.

COMMUNICATIONS not noticed in our present issue will receive attention in our next.

During the week marked copies of the following newspapers have been received:—*Horsham Times, Western Morning News, Llandudno Directory, Norfolk Daily Standard, Glasgow Record, Eastern Morning News, Birmingham Gazette, Times of India, South Durham Mercury, Pioneer Mail, Wolverhampton Chronicle, North Wales Chronicle, Southport Visitor, Hereford Times, Scotsman, Levant Herald, Cape Times, Montreal Star, Bath Journal, Halifax Guardian, Liverpool Daily Post, Newcastle Chronicle, Kentish Gazette, Lynn News, Builder, Louth Times, Herts Reporter, Cambrian, Manchester Guardian, Citizen, Architect, Wakefield Free Press, Leeds Mercury, Batley Reporter, Sussex Daily News, Carnarvon Herald, Northern Daily Telegraph, Yorkshire Post, East Anglian Daily News, Chester Chronicle, Brighton Gazette, Sheffield Independent, Birmingham Post, Bristol Mercury, Cornish Telegraph, Hemel Hempstead Gazette, Market Harborough Mail, Chorley Standard, Optician, Medical Pioneer, Local Government Chronicle, Mining Journal, Reading Mercury, Weekly Free Press and Aberdeen Herald, Hertfordshire Mercury, City Press, Brecon and Radnor Express, Guy's Hospital Gazette, Surrey Advertiser, Berkshire Chronicle, Local Government Journal, Surrey Gazette, Spalding Free Press, Oban Times, Elgin Courant, Durham Chronicle, Oswestry Advertiser, South Western Star, Gray's Standard, Tonbridge Telegraph, Northampton Mercury, Citizen (West of England), Morning Leader, Chesham Advertiser, West Middlesex Herald, Nuneaton Advertiser, Observer, Munster News, Leighton Buzzard Observer, &c., &c.*

Communications, Letters, &c., have been received from—

A.—Mr. A. E. Archer, Rosario, Argentine Republic; Alpha, Lond.; Apollinaris Co., Lond.; Messrs. Allen and Hanbury, Lond.; Mr. John Adams, Lond.

B.—Mr. L. Bidwell, Lond.; Mr. H. F. Baker, Lond.; Messrs. J. Bell and Son, Nottingham; B., Lond.; Messrs. W. V. Bowater and Sons, Lond.; Messrs Blondeau et Cie, Lond.; Birmingham Free Hosp. for Sick Children, Sec. of; Mr. F. S. Beachcroft, Lyme Regis; British Gynæcological Society, Lond., Hon. Secs. of; Box 23, Leeds; Dr. C. Beck, New York; Messrs. Burgoyne, Burbidges and Co., Lond.; Dr. W. L. Brown, Shildon.

C.—Mr. T. J. Croke, Harrogate; Messrs. T. Christy and Co., Lond.; Messrs. S. Clark and Co., Lond.; C. S., Lond.; Mr. Brudenell Carter, Lond.; Dr. A. E. Cordes, Geneva; Dr. R. N. Carless, Devizes; Cumberland Infirmary, Carlisle, Sec. of.

D.—Sir Dyce Duckworth, Lond.; Messrs. A. De St. Dalmas and Co., Leicester; *Domestic Engineering*, Lond., Editor of; Messrs. Dawson and Sons, Lond.; Mr. W. Doughty, Chillington; Mrs. Day, Lond.; Dewsbury and District General Infirmary, Sec. of.

E.—Dr. W. Ellison, Eton; Mr. J. R. Essex, Pontypool.

F.—Prof. Michael Foster, Shelford; Mr. Willoughby Furner, Brighton; Messrs. Fannin and Co., Dublin; Mr. J. J. Fraser, Clitheroe.

G.—Dr. J. H. Griffiths, Shooter's Hill; Messrs. W. Gaymer and Son, Attleborough, Norfolk; General Electric Co., Lond., Manager of; Dr. Arthur Graham, Soham.

H.—Mr. S. O. Hall, Walsingham; Mr. P. Hayes, Bury; Surg.-Capt. Patrick Hehir, Hyderabad; Mr. W. P. Harding, Rathmines; Mr. J. Heywood, Manchester; Dr. E. V. Halliday, Christiana, Jamaica.

I.—Ings House Nurses' Co-operation, Lond., Lady Supt. of.

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